

IBERDROLA

UTILITIES

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COMPANY REPORT

6 JANUARY 2017

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Betting on Stability

Improving earnings visibility for the future

- We have started the valuation on Iberdrola with a Hold recommendation, with a target price 6.24 EUR, which is a 6.14% return on Iberdrola's current share price. The stock trades above its peers in P/E (+8.07%) and in EV/EBITDA (+32.13%)
- Until 2020, Iberdrola intends to primarily invest in highly regulated sectors such as the Networks and Renewables (78% of the CAPEX). Wind offshore will see an unprecedented investment and many CCGTs will open in Mexico
- The CO2 and renewable targets that were defined in COP 21 for renewables and the gap between current wind installed capacity and the one targeted by the EU, entails that investment in renewables will be eased over time (less regulatory risk)
- The issue of the Spanish tariff deficit appears to be behind as for the past two years surpluses have been accomplished and the system debt is on a sustainable path
- The ambitious expansion plan until 2020 will marginally increase Financial Leverage (+1.96%)

Company description

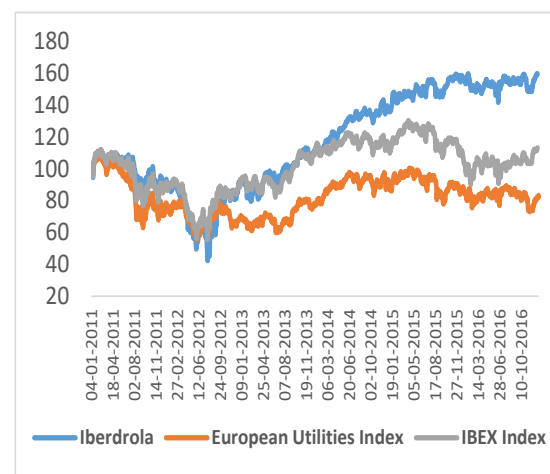
Iberdrola is the biggest utility company operating in Spain with a leading position in renewables (mostly wind energy). Iberdrola is a global, vertically integrated value chain, which can be separated into three different businesses: power generation, power transmission and distribution and, finally, supply of electricity and gas to end-users.

Recommendation: HOLD**Price Target FY17:** 6.24 €**Price (as of 6-Jan-17)** 6.13 €

Bloomberg: IBE SM Equity

52-week range (€)	6.597-4.80
Market Cap (€m)	36.432
Outstanding Shares (m)	6362.08
Free Float	76,08%
YTD (%)	-3.99%

Source: Bloomberg



Source: Bloomberg

(Values in € millions)	2015	2016E	2017F
Revenues	31,419	31,042	30,642
EBITDA	7,306	7,555	7,815
Net Profit	2,422	2,172	2,295
EPS	0.382	0.341	0.361
DPS	0.275	0.256	0.271
P/E	16.88	17.96	16.99
Div Yield (%)	4.26	4.18	4.41
ROE (%)	6.52	5.91	5.23
ROIC (%)	4.57	3.85	3.98
EV/EBITDA	9.55	9.08	8.88
Net Debt/EBITDA	3.96	3.92	3.89
Leverage (%)	41.38	41.64	41.92

THIS REPORT WAS PREPARED BY "STUDENT'S NAME", A MASTERS IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS, EXCLUSIVELY FOR ACADEMIC PURPOSES. THIS REPORT WAS SUPERVISED BY ROSÁRIO ANDRÉ WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (SEE DISCLOSURES AND DISCLAIMERS AT END OF DOCUMENT)

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Executive summary

Iberdrola is the largest utility company in Spain and is the leader in wind energy in the world. As of the end of 2015, the company's installed capacity was equal to 44,574 MW and its overall net production was 130,594 TWh. Furthermore, the main employed technologies in decreasing order are the following ones: Wind Power, Gas combined Cycles, Hydraulic, Coal, Nuclear and Cogeneration. In fact, 64% of the generation mix is emission free, as a result of the continuous bet of Iberdrola in clean and efficient energy. Due to the CO2 and renewables targets defined in COP 21 along with the UK carbon tax (£18/ ton of CO2) and policy to close all coal plants until 2025, Iberdrola closed in early 2016 a 2300 MW coal plant in UK. Moreover, the company will the launch of many CCGTs and Cogeneration plants in Mexico (3450 MW until 2020), as well as the opening of a very large Hydroelectric complex in Portugal (1200 MW). As far as renewables are concerned, we must highlight the two substantial investments: onshore wind in the US (1443 MW will be added until 2020) and an unprecedented bet on offshore wind in the UK and in the RoW. The latter will take 45% of all the investment in renewables until 2020 – 2,925 M€ - and 1639 MW will be added.

Most of the investments will not take place in Spain thanks to the lower allowed returns in renewables and networks than in other regions as well as stagnant liberalised business. Nevertheless, the Spanish electric tariff deficit has entered into a sustainable path after 14 years of annual deficits. In the end of 2015, 54.29% of Iberdrola's EBITDA derived from outside Iberia, which is a higher percentage than its Iberian peers (EDP, Gas Natural and Endesa). The comfortable balance sheet of the company will allow the realization of the ambitious target of 21.172bn€ investments for the period of 2016-20 (leverage will increase slightly from 41.38% to 42.20%, from 2015 to 2020). The fact that 78% of this investment will be directed into regulated and long-term contacted activities (70% will take place in the UK and in USA) provides great visibility, security and cash-flow stability on the future of the company. The company will only begin to create value from 2020 onwards (total ROIC of 4.33% will exceed the WACC of 4.25%), as a result of its heavy investments that take time to create value

In 2016, Iberdrola's performance outperformed the sector (SX6E) outperformed by 3% (Iberdrola had a return of -4.82%) mostly due to the strong impact from Brexit (great devaluation of the sterling) and also due to fall in power and commodity prices. I start covering Iberdrola with a Hold recommendation and I have achieved a target price of 6.24€, through a SOTP valuation (6.14% upside).

64% out of 130,594 TWh generated in 2015 was emission free

Iberdrola will close coal plants, launch more CCGTs and continue to bet on onshore and offshore wind

78% of the investment until 2020 will be directed into regulated and long-term contacted activities

Iberdrola's performance has been weaker than SX6E due to the impact from Brexit and fall in power and commodity prices

I initiate a coverage on Iberdrola with a Hold recommendation with a price target for FY17 of 6.24€

Company Overview

Company International Path

In 1992, Hidroeléctrica Espanola and Iberduero joined to become Spain's largest private electricity utility (Iberdrola). Then, from 2001, Iberdrola consolidated its position as a global leader in the development of clean energies, looking ahead to future trends in the sector at an early stage. This bet had to do with the company's prediction in 2001 that there would be a surge in world energy demand that would only be satisfied by clean and sustainable energy sources. In 2007, Iberdrola decided to get involved on a major expansion process, through the increase of its presence in the UK via the integration of Scottish Power (purchased for 17.1bn EUR in April 23rd ¹). As a result of this acquisition, net income increased 42% relative to 2006 and assets have more than duplicated (+106%). More importantly, since shareholders' equity increased 163.3% and net debt increased only by 56%, financial leverage² decreased from 55.3% in 2006 to 42.4% in 2007. All in all, it allowed to create value for shareholders as in 2007 shares rose 25.6%, while the EuroStoxx Utilities rose 24.2% and the Ibex-35 grew 7.3%. In 2008, Iberdrola expanded to the US and Energy East³ was purchased for 6.4bn EUR in June 25th. In 2011, as part of the expansion to high-growth economies to offset the weaker Spanish home market, the company acquired the Brazilian company Elektro for a value around 1.6bn EUR⁴. The purpose was to merge Elektro with the Neoenergia (Iberdrola owned 39% of this company), making the combined entity one of the largest utilities in Brazil. Finally, in 2015, Avangrid⁵ is created from the amicable merger between Iberdrola UDA and UIL holdings corporation for 3bn USD. This made that total financial debt to increase from 14.352bn € (2006) to 30.561bn € (2015).

The company has the following business lines and is present in the following countries: Networks (Spain, USA, UK and Brazil), Liberalised and Supply (Spain, Mexico and UK) and Renewables (Spain, USA, UK, Latam and Rest of the World).

¹ This acquisition was one of the largest Spanish history and three capital increases were carried to enable the transaction. Scottish Power contributed 24% to 2007 Iberdrola's EBITDA and electricity production increased 34.2% in that year. Immediately after the acquisition was announced the stock lost more than 2%, as the market turned disappointment that the offer was not all cash (54% debt financed)

² Financial leverage= Net Debt / (Net Debt + Shareholders' Equity)

³ Also known as Iberdrola USA, this deal was 48% debt financed. In June 25th the stock fell 3.8% and in the space of a month the stock did not recover. So, in the short term this deal did not add value for the shareholders, maybe due the fast pace of capital increases and expansion of debt to fund the acquisitions made in 2007.

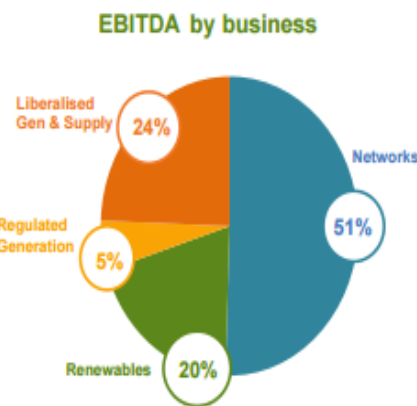
⁴ All cash deal, but Iberdrola assumed 369M € of debt of Elektro. At the date of the announcement Iberdrola's shares rose 0.9% to 6.22€

⁵ Iberdrola has a 81.5% stake in Avangrid. When this deal was announced in 24th of February the stock rose 2.4%. This company is the result of the merger between Iberdrola USA and UIL Holdings, creating a larger and more diversified utility company with seven highly regulated electric and gas utilities and a 6.5 GW long term contracted in renewables with 30bn USD in assets. It was expected to offer stable returns to offset the sluggish economy in Spain

From an early stage, Iberdrola decided to invest in sustainable sources energy that would meet the global rise of energy consumption and has been exploring growth opportunities outside the Spanish market.

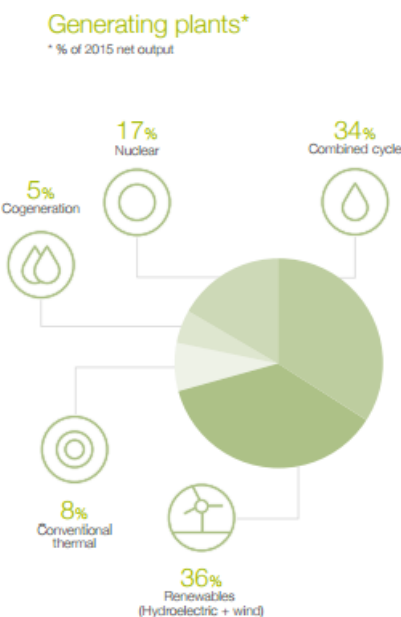
Most of these acquisitions and mergers created value to Iberdrola's shareholders and led to the higher level of debt from Iberdrola. Financial Debt more than doubled increased from 14.352bn € in 2006 to 30.561bn € in 2015

Figure 1: EBITDA of business lines in 9M 2016



Source: Iberdrola's Website

Figure 2: 2015 Net Output from Iberdrola's Generation Plants



Source: Iberdrola's Website

Business Description

As most of the Utilities, Iberdrola is vertically integrated, meaning that it owns all levels of the supply chain. In the first phase of the value chain, Iberdrola generates electricity through the construction, operation and maintenance of generating plants and purchase/sale of energy on the wholesale markets. The fact that Iberdrola's portfolio is highly comprised of gas and wind power is quite valuable as, according to the *World Energy Outlook 2015*, most of the capacity added until 2040 will be in gas, wind and solar. In the second phase it transmits and distributes power needed to transfer electrical power from the production centres to the end users. Finally, the retail sale of energy consists of the supply of energy to end users. As of the end of 2015, 90.2% of all end users were in the residential segment. In Iberdrola's activity, there is a clear focus on basic and regulated businesses, and approximately 76% of the EBITDA (as of September of 2016) came from regulated businesses and long-term contracts (Networks+ Renewables + Regulated Contraction). The main risk arising from these regulated activities is the regulatory risk, due to the unexpected introduction of laws, regulations or amendments to the already existing ones, but are less exposed to market and demand risks. However, this segment is not necessarily more stable, as the measures in this sector in Spain came to prove in 2012⁶. Also, the recent result of the US elections have also come to add more regulatory risk to renewables, which are also highly regulated and subsidized. It is worth saying that the majority of the overall regulation that affects Iberdrola has a long visibility window (only two operations in the US have a regulatory review in 2017). On the other side, the generation and supply business is mainly affected from fluctuations in commodity prices, plant availability, change in electricity and gas demand and changes in weather, which affects hydroelectric and wind energy. These variations will affect the load factor of each technology, which will make the earnings of this sector to vary accordingly⁷.

As it will be further covered in the “Discount Rates” chapter, it is fair to say that utilities with more regulated activities have a lower systematic risk, than the ones with a higher percentage of liberalised operations⁸. Indeed, this systematic risk can be measured by the average of the unlevered betas of the comparables. For

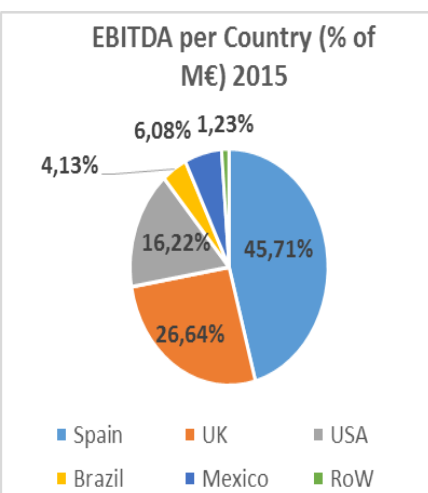
⁶ In fact, in 2013 EBITDA fell 16.45% relative to the previous year. In 2012 and 2013, the Spanish government cut in the remuneration of networks, increased access tariffs, introduced a 7% on electricity generation and cut renewables, waste and co-generation compensation. This was done to tackle the unsustainable electricity deficit. In fact, accumulated deficit peaked at the end of 2013 at 29bn €. According to IEA, it should disappear over the next 15 years

⁷ For example, a contraction in electric demand along with an increase of the variable cost of gas in Spain (if, for instance Brent were to increase its price), would probably drastically reduce the remuneration of Gas central plants as now they would be less and less remunerated at market prices (would enter less in the merit curve). This would have more negative impact in Gas Natural than Iberdrola, since the former had a 57% market share and Iberdrola just 9% of all the installed capacity of CCGTs as of 2015, in Spain. Further clarification will be provided in the “Electricity Market Dynamics and Outlook”

⁸ This analysis was based on the main European utilities (Iberdrola peers) in the in the “Discount Rates” chapter

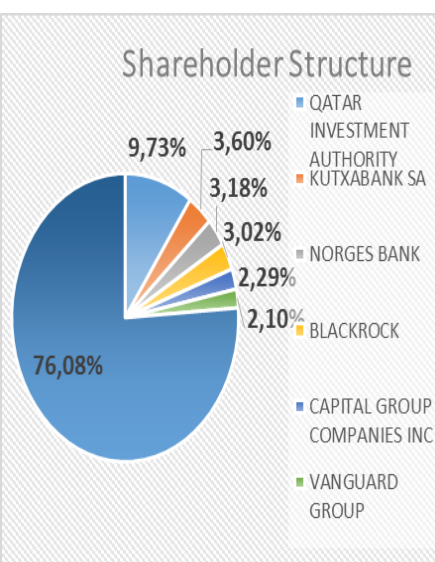
The International share of the earnings has been increasing and is now close to 55%, due to the continuous political and economic instability in Spain

Figure 3: EBITDA per Country (% M€) 2015



Source: Analyst's Research and Company Report

Figure 4: Shareholder Structure as of the end of 2015



Source: Bloomberg

regulated utilities we ended up with a beta unlevered of 0.434 and for utilities with higher percentage of liberalised activities we achieved a value of 0.525 (21% higher).

As far as the share of earnings is concerned, the majority of Iberdrola's earnings comes from outside of Spain and is now close to 55%. This is mostly due to the continuous regulatory and economic instability that the country has been witnessing, as it was already mentioned. Inversely, a significant portion of the earnings has been coming from stable and high-rating countries like the US and the UK, and from emerging economies such as Mexico and Brazil.

Finally, the company is the number one renewables producer among European utilities and its emissions are 30% below average of the European sector.

Additionally, Iberdrola has the commitment of 50% emission reduction by 2030 and to be Carbon Neutral by 2050, which helps to explain the closure of the 2300 MW coal plant and the continuous bet on wind and hydroelectric energy.

Shareholder Structure

The main shareholders of Iberdrola are *Qatar Investment Authority* with 9.73% and *Kutxabank SA* with 3.60% of current shares and total voting rights. Also, the percentage of free float is more than three quarters, entailing that there is a lot of liquidity in Iberdrola's shares. No major changes are expected to take place in the future from the major shareholders and Iberdrola will continue its scrip dividend program. This shareholder remuneration system was implemented to allow a shareholder to decide if he wishes to receive all or a portion of their compensation in cash or in paid-up shares of Iberdrola. The shareholder can sold his rights to Iberdrola and he will receive cash at the guaranteed fixed price per right⁹ or he can sell them on the market. This system has been in practice in previous years and is expected to be maintained in the future. The future payout should be between 65%-75%¹⁰, according to Iberdrola's guidance. Also, the number of shares was assumed to be kept equal to the number registered in the end of September of 2016 - 6,362M

In the financial year of 2015, the most significant changes in the shareholding structure were the following ones, as described in the 2015 annual report: *Actividade De Construcción Y Servicios, S.A* decreased their share capital to below 3% in late March and *Norges Bank* in late December increase their share capital to above 3%.

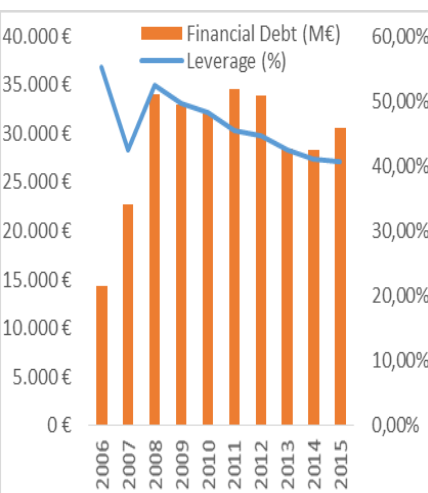
⁹ Since in the first nine months of 2016 net profit stood at 2,042M€, up 6.4% with respect to the same period in 2015, Iberdrola has decided to increase shareholder remuneration by 8%, which will be done by the purchase of each allocation right of at least 0.135€ (share buyback to avoid dilution of its shares)

¹⁰ Based on the past payout ratios that we have computed for Iberdrola, a 75% payout ratio was assumed from 2016 until perpetuity

Iberdrola's leverage will marginally increase in the future, after having accumulating a lot of debt on its international expansion plan in the past. From 2008 until 2015 financial leverage was gradually reduced

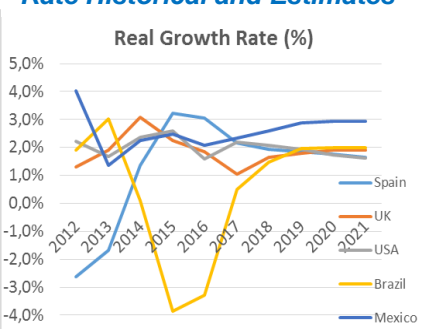
Moody's attributed Baa1 rating to Iberdrola's debt and S&P attributed BBB+

Figure 5: Historical Leverage and Financial Debt Analysis



Source: Analyst's Estimates and Company Report

Figure 6: Real GDP Growth Rate Historical and Estimates



Source: Analyst's Estimates and IMF data

Leverage Analysis

First of all, as a result of the expansion plan already described above from Iberdrola, a lot of debt has been accumulated since 2007. Financial Leverage has been gradually reducing from 2008 after the acquisitions of Scottish Power (2007) and Energy East (2008) from 52.50% to 41.38%, in the end of 2015¹¹. According to our future expansion program for Iberdrola, since net debt grows at a slightly larger pace than shareholder's equity¹² financial leverage is estimated to increase 2%, from 41.38% to 42.20%. Note that thanks to the significant growth estimated in EBITDA from these investments, Net Debt/EBITDA is estimated to decrease from 3.96 (2016) to 3.68 (2020). Finally, gross financial debt is estimated to increase 9.26% to 33,422bn € and Net debt to 9.88% (27,358bn €).

In 13th of February of 2016 Moody's attributed the Baa1 rating for the senior unsecured Iberdrola's debt. The rating rationale had to do mostly with Iberdrola's exposure to a weakening power price environment due to the fall in commodities prior to this rating decision (coal declined over 20%). Generally, the higher the percentage of the regulated business, the higher is the ability of utilities companies to contract more debt without hurting its credit rating. This is mostly due to the higher degree of cash flow visibility of regulated activities relative to liberalised ones (this evidence is shown in Appendix 1). In September of 2016, Iberdrola's overall regulated business represented 76% of Iberdrola's EBITDA, which was above most of its closest peers average (shown in Appendix 6), which supports superior overall cash flow stability and predictability.

Iberdrola's has taken advantage of the current low interest rate environment, reducing financial costs from 2013 until 2015 as its floating rate debt (mainly in EUR) increased from 37% to 54.4%. There is a structural FX hedge by having a similar percentage debt in the same currency that the funds from operations are coming from.

Macroeconomic Environment

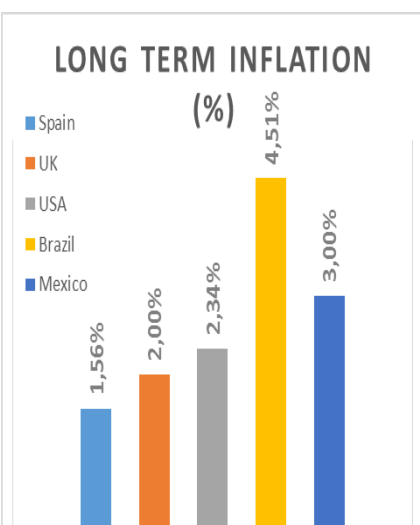
Economic and Political Summary

The consensual macroeconomic outlook is that there will be a global moderate economic recovery and that interest rates will gradually increase as monetary

¹¹ Total financial debt increased from 14.352bn € in 2006 to 30.561bn €, in the end of 2015

¹² Total shareholder equity was estimated to increase 7.8%, without any future capital increases from shareholders. The only growth driver is the positive difference between the net profit and the distributed dividends in each year

**Figure 7: Long term
Inflation estimates**



Source: Analyst's Estimates and IMF data

In the US, renewables will go through a volatile process after Trump presidency; in the UK, Brexit we expect future currency devaluation; in Brazil the economic scenario is the darkest as the country recovers from the latest economic recession

policies normalize, with the exception of Brazil where rates will be cut. According to the *IMF*, World's GDP growth rates should be around 3.4%-3.6% in the next 5 years and this growth will be mostly fuelled by emerging economies (4.3%-4.7%), whereas advanced economies should continue to modestly recover (1.9%-2.1%). The ECB should continue its accommodative monetary policy in a context of low inflation and low interest rates, which benefits dividend-like stocks such as utilities. On the other hand, in the US, gradual tightening of the monetary policy will continue to take place due to the continuous strong performance of the economy. As to Latin America, the rapid fall in oil and commodity prices has been having a negative impact and have come to exacerbate the ongoing troubles in the region. Thus, investors will also require a higher interest rate due to the higher expected rate of depreciation of the currencies, as seen in the forward market (in which all the exchange rates were drawn upon).

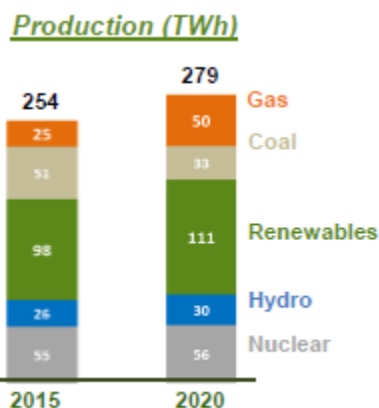
In Spain, after the country struggled until recently after the crisis, the macroeconomic outlook appear to be stable, especially now that there is a solid government in the country. In the UK, the impact on Brexit is so far negligible on UK utilities. However, despite the limited sector risk, the P&L will look weaker when earnings are converted into EUR in the future, as after the exchange rate against the EUR is significantly higher than it was in 2015. In the US, with the recent and unexpected election of President Trump, there might be some instability for the growth of renewables projects and wind farms in particular, since he highly supports coal and fossil fuels. Despite, some controversial statements regarding CO₂ emissions and the Paris agreement from the President, production tax credits of renewables do not appear to be under pressure (vital to renewables in the US). Moreover, we might have ahead of us a tighter monetary policy as a consequence of the increase in public spending that Trump supports. In Brazil, GDP growth is not expected until 2017/18, with the economy approaching the 2% in 2020. Inflation rate should decrease from the 9% registered in 2015 to 5% in 2020. It remains the most challenging market for Iberdrola, whereas, in Mexico both GDP growth and inflation by 2020 should be nearly 3%, this region is expected to be one of the growth drivers for the group.

**Figure 8: Exchange
Rate Historical and**

	Exchange Rate Historical and Forecasts						
	2015	2016	2017	2018	2019	2020	2021
Euro-Dollar	1,11	1,09	1,11	1,13	1,15	1,15	1,15
Euro-Pound	0,74	0,89	0,90	0,91	0,92	0,92	0,92
Euro-Real	3,70	3,49	3,83	4,11	4,11	4,11	4,11
Euro-Peso	17,51	20,66	21,12	21,42	21,86	21,86	21,86

Source: Bloomberg and Analyst's Estimates

**Figure 9: Spanish
Production Mix Estimates**



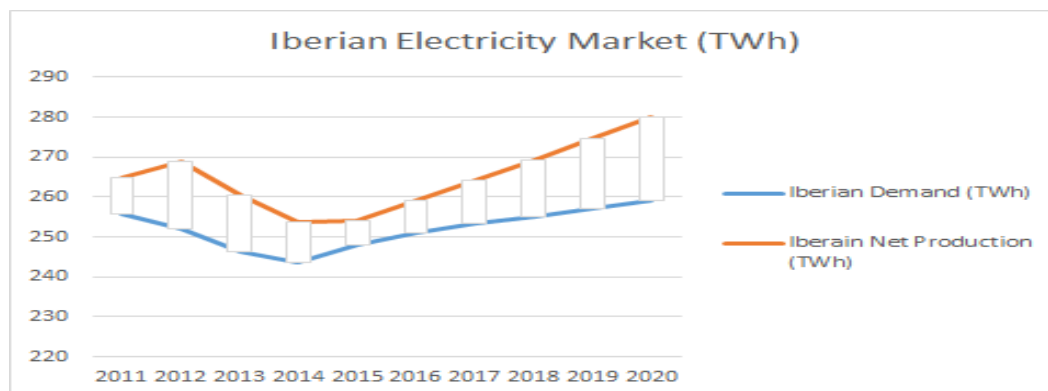
Source: Iberdrola's Website

**Demand of the Spanish
electricity market will
expand at an annual average
pace of 0.87% and supply at
a pace of 1.97%**

Electricity Market Dynamics and Outlook

In Spain, electricity generation peaked at 311 TWh in 2008, after years of booming. From that year onwards, generation has been following a downward trend, with electricity generation reaching to 254 TWh in 2015. This value is expected to expand by 10% to 279 TWh by 2020, according to Iberdrola's predictions (we have incorporated these estimates to predict the future net production in Spain). In this country the major sources of electricity production are the following ones: renewables (39%), nuclear power (22%) and coal (20%). While wind and solar power generation have boomed over the past decade (in the future should increase at a slower rate), coal and oil fired generation have halved and will decrease further. Annual demand growth has a relation with GDP growth, as a consequence of industrial consumption. Its growth was equal to 1.8% in 2015, at 248 TWh. In fact, demand peaked at 2008 at 261 TWh in 2008 and, after decades of mild growth and since 2011, it has decreased consecutively until 2014 at an average annual pace of 1.67%. This was due to tax increases during this period, increasing energy prices and reducing demand. We predict that until 2020 annual demand electricity growth should expand annually, on average, 0.87%. This estimate came after analysing data from 2011 we have concluded that annual electricity increases only 40% of the real GDP of that year,

Figure 10: Iberian Electricity Market (TWh) Estimates

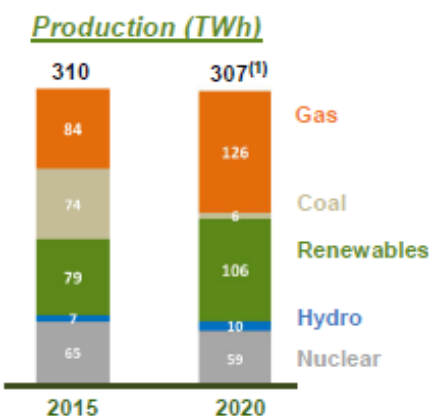


Source: Iberdrola's website, IMF and Analyst's estimates

**The severe cuts on renewables
and regulated returns and
increase of taxes on electricity
generation were vital to
decrease and put the Spanish
tariff deficit on a sustainable
path, decreasing the burden on
Iberdrola**

Another issue that is important to approach is the Spanish tariff deficit, as it was already referred. In 14th March of 2016, Moody's declared that the electricity tariff debt was decreasing and heading towards sustainable levels and would enjoy future stability. As of the end of 2015, the system debt was cut by 7% to EUR 25.056 bn in comparison to a year earlier. This was possible due to cuts on regulated activities and on public subsidies to renewables energy from EUR 9.3 bn in 2013 to EUR 6.8 bn (-27%) in past years. It was the first year of surplus (EUR 550M) after 14 consecutive years of deficit. This has contributed to the system's deleveraging, which constitutes good news for Iberdrola. In 2016,

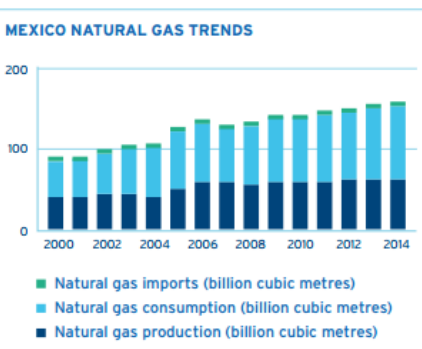
Figure 11: UK Production Mix Estimates



Source: Iberdrola's Website

UK regulation on the closure of coal plants, introduction of carbon tax floor and cut in renewables might create insufficient power supply to meet the rising demand

Figure 12: Mexican Gas Additions



Source: Scottia Bank

CNMC (National Markets and Competition Commission) estimates that EUR 2.871 bn of debt will be paid.

In the UK, total electricity generation in 2015 was 310 TWh and the major sources of electricity production were more or less evenly distributed with a higher share of gas (27%), followed by renewables (25%), coal (24%) and nuclear (21%). According to Iberdrola's estimates, production should decrease just slightly to 307 TW (we have incorporated these estimates to predict the future net production in the UK). However, UK policies to close all coal-fired power stations by 2025 along with the 18£ carbon tax floor has contributed to the closure of many coal plants (including Iberdrola's 2.3 GW coal plant in early 2016) and to the increase capacity of renewables and gas. In fact, coal's share decreased from 20.3% in 2015 Q2 to a record low of 5.8% in 2016 Q2, while gas increased from 29.9% to 45.2% in the same period. On the other side, final consumption of electricity during the Q2 2016 was equal to 303 TWh and was in line with 2014. These policies along with the intention of retiring the majority of the its ageing nuclear fleet and cut in renewables subsidies conflict with the likely higher energy demand in 2025. As a result, a significant electricity gap might appear in the future and the solution passes through the construction of CCGTs, nuclear and fossil fuels and through electricity imports in order to plug this gap.

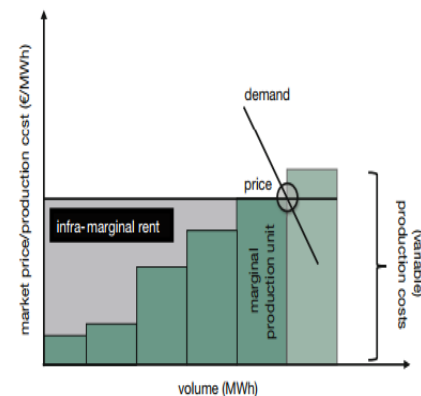
In Mexico, as of the end of 2015, total electricity generation was 65 GW, and it has remained rather flat over the last four years, with renewables capturing a share of 25% (including hydro and nuclear) and the rest being generated from fossil fuels (dominated by natural gas, which has surpassed oil as the main fuel for power generation). Also, almost all of the 14 GW of capacity additions since 2002 were in the form of CCGT and Iberdrola plans to increase its CCGT installed capacity in this area. The major fossil fuels' share along with ageing assets has resulted in high prices of electricity in recent years, which explains the bet on natural gas and renewable/non-fossil fuels for electricity production. The Energy Reform Act of 2014 is aimed at ending the state monopoly in the hydrocarbon and electricity sector (networks will still remain state-owned), encouraging new projects in new generation, increasing the efficiency and competition. Mexico's electricity demand is forecasted to grow by 4% annually from 2015 until 2024.

Power Prices

For Iberdrola's liberalized business in Spain and in the UK, it is very important to evaluate the future evolution of commodities prices (crude oil Brent for gas in Iberia, NBP for gas in UK and coal API2) and CO2 allowances. This analysis serves the purpose of forecasting the marginal cost of each generating

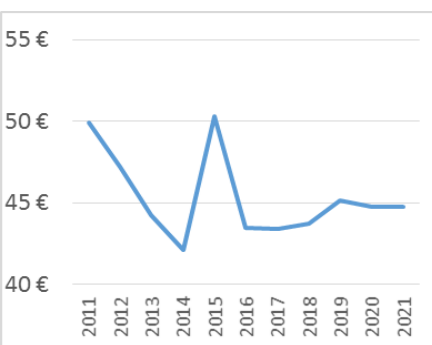
Figure 13: General Merit

Simplified cost-production curve



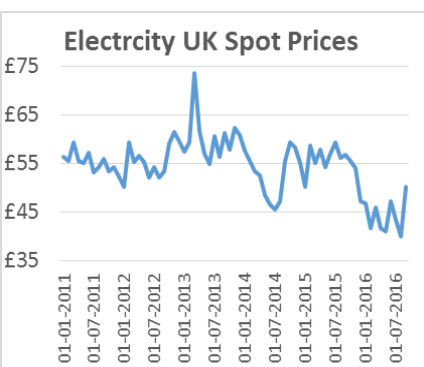
Source: ZBW – Leibniz Information Centre for Economics

Figure 14: OMIP: Spanish Pool Prices



Source: Bloomberg and Analyst's estimates

Figure 15: Electricity UK Pool Prices: N2EX (£/MWh)



Source: Bloomberg and Analyst's estimates

technology, which is vital to understand the evolution of the power prices in these two regions. The Iberian electricity market is represented by the OMIP and in the UK it is represented by N2EX. As it is known, low emission technologies have low variable costs but high fixed and installations costs, while more polluting technologies have higher variable costs and are dependent on commodity prices and CO2 allowances. In the end of 2015, 47% of Iberdrola's net production was exposed to these factors (cogeneration, CCGTs and conventional thermal), so this analysis is quite relevant. Our predictions of the future OMIP, N2EX, commodity prices and CO2 allowances should follow the latest market expectations, so we have recurred to the forward markets (Appendix 7).

From 2008 to 2014, there's been a strong decline in market prices for electricity and the main causes are the following ones: decreasing of coal prices, oversupply of carbon allowances which ultimately results in its prices decrease (-73% variation from 2008 until 2014) and an overcapacity of power production plants (caused by stagnant electricity demand growth and growth of renewables). The daily electricity price in a market is determined by the last unit of a particular technology needed to satisfy demand¹³. For instance, lower prices for coal and carbon allowances reduce the variable cost of coal plants but for this to have an impact on market prices depends on whether or not coal is the price-setting technology.

In the end of 2015, Spanish wholesale prices remained quite high in 2015 due to low hydro generation (dry season) coupled with low wind generation, which led to an increase in electricity generation costs (share of fossil fuels, more expensive, went up in the power mix). In the Q1 of 2016 there's been a decrease in wholesale prices since rainier weather has enabled a ramp-up of hydro generation and renewables assured 54% of the whole generation (was only 28% in December of 2015). In normal conditions of demand (medium or high) gas is the marginal setting technology and will continue to be in future, as it was in the past.

In Q1 of 2016, UK wholesale price went down significantly in the last two years due to the renewables boom, lower gas prices (NBP) and lower demand. Clean Spark Spreads have gone up as spot gas prices fell faster than electricity prices, while Clean Dark spread are turning negative, which has been pushing coal-fired plants out of the money. Normally, coal is still cheaper than gas, even though gas prices have collapsed. However, from 2016 onwards the implemented carbon tax

¹³ As a result, in the auction, each successful supply offer is rewarded with the same price, independent of its offering price, which illustrated by the Merit Curve. Normally, this curve comes in an increasing source price order: renewables (wind and sun are for free), hydro, nuclear, coal, gas (running costs are typically lower than CCGT for low carbon permit prices) and finally peak plants (run by diesel) and are meant to cover rare peaks in demand.

means of 18€/ton is more than enough for gas to run ahead coal. This means that until 2015 gas used to be the marginal technology and from 2016 onwards it will be coal thanks to the mentioned tax, leading to the closure of many UK coal plants. Appendix 7 illustrates this, as we have calculated the marginal cost of gas and coal in the UK.

Renewables New Wave

It is widely known that in the last years there's been a so-called “energy transition” that has been sweeping across Europe through the de-carbonization of the economy, which will ultimately change the generation based in a marginal pricing system. However, at an European level, unless a Capex step-up takes place, for sure that the EU decarbonisation binding targets will be missed. China and the US have already introduced decarbonisation plans just ahead of COP21 last year, for the first time, which intends to limit the temperature increase below 2 degrees (commitments from 195 countries). The main growth drivers of the future of new renewables capacity is the greenhouse gas (GHG) emission cut targets set at a European level¹⁴, ongoing decline costs in renewables CO2 pricing (emission reduction mechanism) and lower subsidies to fossil fuels. It is expected that by 2020 in Spain, 39% of electricity demand should be covered by renewables and the EU has defined a goal of 42.7% in 2030 and 50.1% in 2050¹⁵.

Renewables additions in Europe continue at a pace of 10GW per year (1.5% of overall European installed base) and by 2025, it is estimated that wind and solar will account for 50% of the EU installed base. In fact, according to the EU renewables targets for installed capacity both wind onshore and offshore are the sources of renewables that are still very much apart from its 2020 EU targets (wind onshore 2014 was 220 TWh and offshore was 15 TWh and their target for 2020 is 352 TWh and 134 TWh, respectively), which entails that massive investment is bound to take place in this source in particular. Nevertheless, these environmental goals and major investment in renewables must be compatible with security of supply, so power grids¹⁶ will have to be upgraded and digitalized to cope with the inherent output volatility of renewables (i.e: less wind for example in a certain year). It is estimated that there will be more storage of energy and increased conventional generation (back-up capacity).

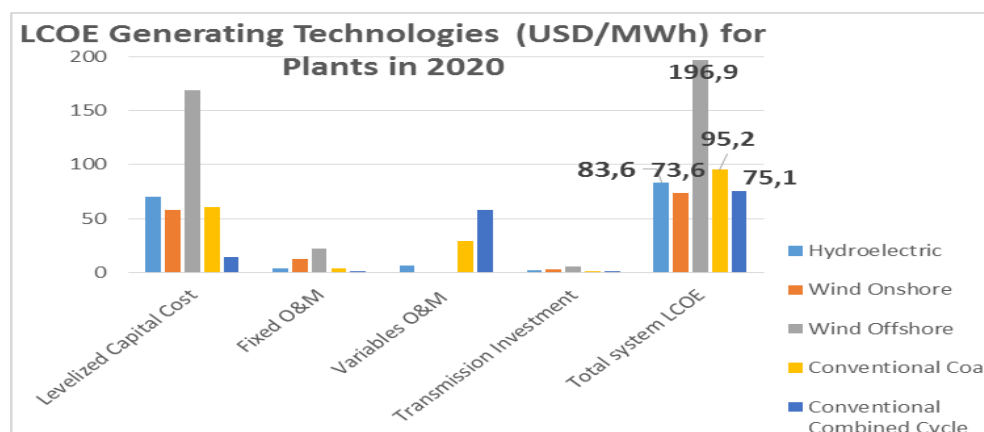
¹⁴ The emissions targets was the following ones: by 2020 20% cut from 1990 levels, by 2030 40% cut and renewables should represent 20% of all energy by 2020 and 27% of all energy by 2030

¹⁵ Notice that renewables targets are only binding at the EU level with no specific targets by country, meaning that the combination of all countries must match the EU target

¹⁶ According to the IEA: World Energy Outlook 2015, it is estimated that until 2040, Networks will see the length of installed power lines doubled and 70% will happen in Emerging economies and the rest in OECD countries, to satisfy the higher energy demand in less mature economies

Moreover, another important driver for the widespread expansion on renewables in Europe (mainly onshore wind and solar) is the LCOE¹⁷ of each technology. As far as the predictions for 2020 are concerned in the USA, wind offshore will remain the technology with the highest LCOE due to its very high capital costs, while wind onshore will have the lowest value (one of the reasons why there is less and less government subsidies to wind onshore). As it will be seen in the “Renewables” chapter, Iberdrola is committed to invest substantially in offshore wind, because despite the higher capital cost, it has a higher load factor and better revenue per MWh.

Figure 16: LCOE for different Technologies (USD/MWh)



Source: US Energy Information Administration

Iberian Peer Analysis

In the Appendix 6 we have made an extensive summary of the main metrics for the most important Iberian Utilities: Iberdrola, EDP, Gas Natural and Endesa, as of the end of 2015. This small set of Iberian companies has a lot in common with Iberdrola, as most of their earnings come from Iberia and they are also vertically integrated utilities that operate in the same core businesses, namely: Networks, Liberalised activities and Renewables.

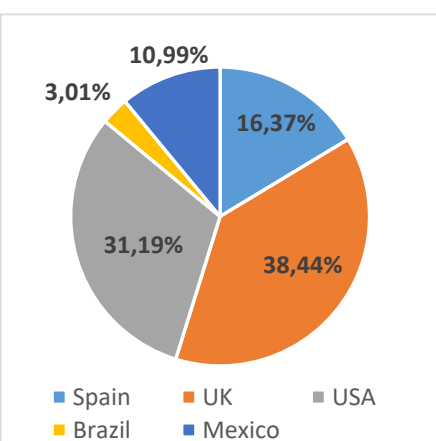
From the analysis of this Appendix, on the one hand, we quickly see that the largest utility companies in the Iberian market in terms of their overall business (Revenues, EBITDA and Net Profit) are Iberdrola and Gas Natural. However, it is important to point out that the majority of Iberdrola's EBITDA comes from outside Iberia, which shows that the company has a superior earnings diversification relative to its Iberian peers, which is deemed vital considering the weak Spanish sovereign outlook. On the other hand, EDP and Iberdrola share similar value in other metrics. They both are the most efficient ones (lowest OPEX/Gross Profit) and they have the highest percentage of renewable installed capacity. Besides,

¹⁷ The Levelised cost of electricity is a good measure of the competitiveness of different generating technologies and includes capital costs, fuel costs, fixed and variable O&M and financing costs. It represents the cost of building and operating a generating plant over its financial time and duty cycle

we notice that they are the most leveraged companies (highest net debt/EBITDA) and they also share the highest percentage of regulated activities, which confirms the analysis performed in the “Leverage” Chapter.

We have also done an historical electricity load factor analysis from 2012 to 2015 in order to have an idea of the efficiency of the technological portfolio of each one of the Iberian companies¹⁸. The purpose of this analysis is the following one: if for some reason electricity prices were to decrease a lot¹⁹, we would like to know which companies would be affected the most. Since gas is and will continue to be the marginal technology in Spain, we should pay attention to the load factors of the CCGTs of these companies²⁰. From this analysis we conclude that Gas Natural and EDP’s CCGTs entered first in the merit curve than Iberdrola’s CCGTs, which is negative for the latter. However, EDP and Gas Natural’s CCGTs installed capacity as a percentage of the total capacity is higher than Iberdrola as of the end of 2015²¹, which would put them more at risk if a significant drop in electricity prices were to take place. Finally, the reasons why Iberdrola in 2015 had the lowest load factor among the competitors were the following ones: Iberdrola has the highest percentage of hydroelectric capacity (38.46%) which had a load factor of just 15% and their CCGTs also had a really low load factor of 4.60% and its installed capacity represents 22.55% of all its capacity.

Figure 17: CAPEX Plan for 2016-2020 by Region



Source: Company Report and Analyst’s estimates

Segmental Forecast

Outlook for the Overall Business

According to the provided business overview outlook by Iberdrola, it is expected that from 2016 to 2020, there will be a strong investment and growth on regulated business and clean energies. More concretely, we have estimated that 78% of the investment until 2020 will take place in regulated or long-term contracted activities²² and 70% in dollars and sterling, with only 16.37% coming from Spain, which reveals the lack of growth opportunities in the domestic market. This is particularly reassuring, as most of the growth will come from countries with a high credit rating. Total capex estimated was 21.172bn€, which is just a little bit below of Iberdrola’s guidance (23.7bn€). Companies usually tend to

¹⁸ This load factor was calculated including renewables for all companies in each one of the four years that were analyzed. Note that this analysis was not conducted for the electricity market in the UK, since, according to my predictions, the EBIT in 2016 in this region will be four times smaller than in the Iberian region.

¹⁹ Note that according to our previsions (from the forward market) OMIP Pool Price, as shown before, are expected to decrease relative to 2015. This year was very dry year (Iberdrola’s hydroelectric production decreased 30.7%), which led to exceptionally high prices, as gas (more expensive) entered more in the curve

²⁰ It is vital to check which CCGTs in Spain are the most efficient and enter first in the merit curve. In 2015, the load factor of the CCGT of Iberdrola, EDP, Gas Natural in Iberia were the following ones: 4.60%, 11.20%, 23.63%

²¹ These percentages for Gas Natural, EDP and Iberdrola are the following ones, respectively: 54.83%, 32.99% and 21.81%

²² More concretely, investment until 2020 in Networks in the Liberalized sector and in Renewables follow these percentages, respectively: 47.23%, 22.07% and 30.70%

overstate their ambitions expansion plans, so we are being more cautious (our CAPEX is just 11% lower than the one provided by Iberdrola). Note that the 2012-2014 Capex plan, Iberdrola's total investment was only 8.3bn€, which contrasts with the 10.5bn€ announced in 2012 for that time period.

If we consider the hydroelectric complex that will be operational in 2020 in Portugal, the many CCGTs and Cogeneration plants that will open in Mexico as well the investment in renewables (according to Iberdrola guidance), an additional 8632MW will be added until 2020. This increase in renewables and the closure of the already mentioned coal plant, will contribute for Iberdrola green policy, as CO₂ is expected to decrease. In a nutshell, in Networks we expect an increased contribution from the USA, mild growth in the other geographies and overall growth to be around low single digit until 2020. In renewables, it is predicted a strong growth in offshore and in onshore (USA and UK) and overall growth should come of high single digit until 2020. Finally, in generation and supply, most growth is supposed to come from Mexico (Spain and UK to remain stable) and a medium-low digit growth is expected to be registered in this business until 2020. According to our estimates for the CAGR 15-20 for the total Iberdrola's EBITDA came at 3.59%: For Networks we have estimated a CAGR 15-20 in the EBITDA of 1.60%, for the Liberalised sector of 1.94% and for the Renewable sector of 7.38%.

Network Business

First of all, the network is the vital element of the electrical system, which allows the integration of renewables and distributed generation. This is a highly regulated business, due to the fact that the companies in a given location have no competitors thanks to the high fixed costs and initial capital required - natural monopoly. That is why the regulators in each region set an allowed return over the invested capital of a company in this business – RAV²³. This return is set according to the particular risk and capital structure of the network business in a certain location. In the specific case of Iberdrola, grid regulation enjoys high visibility in Spain (review in 2020), UK (review in 2022 and 2024), US (review in 2017 and 2018) and in Brazil (review 2020). In September of 2016 this was the most influential line of business, as it represented 51% of Iberdrola's EBITDA. As of the end of 2015 it distributed 243.0 TWh of energy with Spain representing 38% and the US 40% of all the energy distributed. For all the regions in which Iberdrola operates, for simplicity reasons, I have computed the allowed revenues

²³ Regulatory Asset Value: $RAV_t = RAV_{t-1} + Depreciations_{t-1} + Investments_{t-1}$

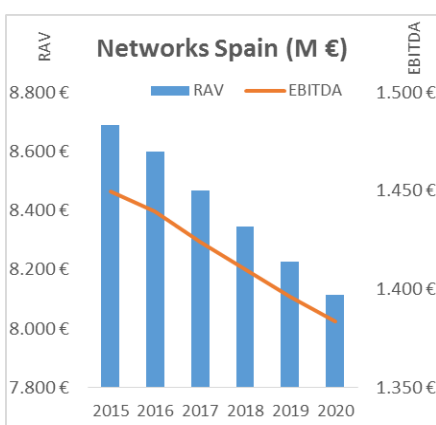
(remuneration for investment²⁴+ depreciation + net operating expenses) and then *other revenues*²⁵ in order to get to the whole revenues caption. Due to the weak/instable macroeconomic outlook in Spain as well as the fact that it has the lowest return on RAV, only 15% of the predicted total investment in this segment will be directed in the national territory (according to Iberdrola guidance). On the other hand, 32% of the investment is expected to take place in the UK and 48% in the US²⁶, once the regulatory outlook in these countries appears to remain stable in the future and they both have the highest allowed return rates. As it will be explained in the “Discount Rates” we estimated a common WACC for all the network business of 4.06%. Since all of the allowed returns over the RAV are higher than this WACC, Iberdrola is creating value for of its shareholders, especially in the US and in the UK, where this difference is larger, and that is why it is investing more in these regions. Finally, I have estimated that total investment between 2016 and 2020 will be of 10bn€, which is just below Iberdrola’s guidance of 11bn€. Additionally, I have predicted that total RAV will increase from 24,665bn € to 27,090bn€, which constitutes a growth of 9.36%.

Figure 18: Main Networks metrics evolution

Country	Electricity Distributed (GWh) 2015	RAV 2015 (M €)	RAV 2020 (M €)	Return on RAV after tax
Spain	94,113	8689	8113	4,68%
UK	34,009	7434	7871	6,39%
USA	31,337	7838	10337	7,1%
Brazil	16,190	810	769	5,34%

Source: Company Report and Analyst’s estimates

**Figure 19: Networks Spain
RAV and EBITDA evolution**



Source: Company Report and Analyst’s estimates

In Spain, energy distribution increased 2.2% increase compared to the previous year to 94,113 GWh along with 10.8 supply points. In this business. The RDL 9/2013 fixes the methodology that will govern the remuneration distribution activities until 2019 (6 year regulatory period). The remuneration on investment will be based on the RAV (was estimated to be around 8,689bn €²⁷ in the end of 2015) multiplied 10y Spanish bonds plus a 200bp spread (6.5% nominal before-tax) plus estimated operating costs plus depreciation. In Spain, according to our estimates, 300M € will be invested annually from 2016-2020, which is slightly less than the 2012-2015 average of 321M€. As depreciations will exceed annual investments Spanish RAV is estimated to decrease -6.6% until 2020 relative to

²⁴ Remuneration on Investment $t = RAV_t \times \text{Allowed Return}_t$

²⁵ This caption refers to the difference between historical revenues and allowed revenues, which includes other services provided by the networks

²⁶ The remaining 5% of all the investment will be in Brazil, though this region is not that important as the RAV is the lowest of all

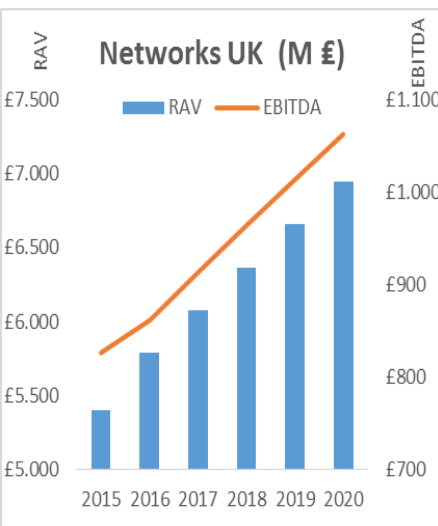
²⁷ Spanish RAV was estimated in the following manner: dividing the financial retribution of 2016 (565M €) by the remuneration rate (6.5%). These values were set by the regulator in 2016 for the year of 2015. The other countries’ RAV were taken from the most recent Iberdrola Capital Markets Day

2015 EBITDA (M EUR) should decrease just -3.84%. Since, as of the end of 2015, total regulated retribution was 1,65bn€, the remaining 0.3 bn€ of the revenues should increase a rate of 5% per year, as they derived from the installation of the smart meters. Therefore, all things considered, the regulatory framework for distribution in Spain will remain rather stable in the next 3 years, and Iberdrola will not prioritize in terms of investments this area due to the weak macroeconomic outlook and low return on RAV after taxes

In the UK, Iberdrola has 3.5M supply points and electricity distributed during 2015 came at 34,009 GWh, falling just 0.6% comparing to the previous year. In this geography, Iberdrola is present with two distribution companies: Scottish Power Distribution (SPD) and Scottish Power Manweb (SPM) and one Transmission company: SP Transmission (SPT). All are under the regulatory authority is the GEMA (Gas Electricity Markets Authority), which is supported by the OFGEM. Prices have been controlled, which is achieved through the new RIIO framework (Revenue = Incentives + Innovation + Outputs) for an eight year period (before it used to be five years, and this gives more stability to investors). This framework encourages networks to deliver an increasing low carbon energy sector, while protecting its consumers. As far as Iberdrola is concerned, the long-term conditions agreed in the UK are the following ones: RIIO-ED1 (distribution) and RIIO-T1 (transmission). RIIO-ED1 runs from 2015-2023 at a 7.5% allowed return (before tax) with a maximum allowed TOTEX of 3.2 bn £ and RIIO-T1 runs from 2013-2021 at a 8.75% (before tax) allowed return with a maximum allowed TOTEX of 2.5 bn£. In this region EBITDA in pounds is expected to see a significant increase as a result of the increase of the RAV, increasing, in turn the remuneration on investment. This has to do with the fact that the average annual investments until 2020 (551.1M£) will just a bit higher than the historical average of 2012-2015 of 530M£. The percentual increase of both the RAV and EBITDA (M£) is actually close to 30%. However, when converted to euros the EBITDA increase is actually very low (6%). This comes as a result of the forward, which is expecting a great pound devaluation from 2017 onwards as a result of the Brexit.

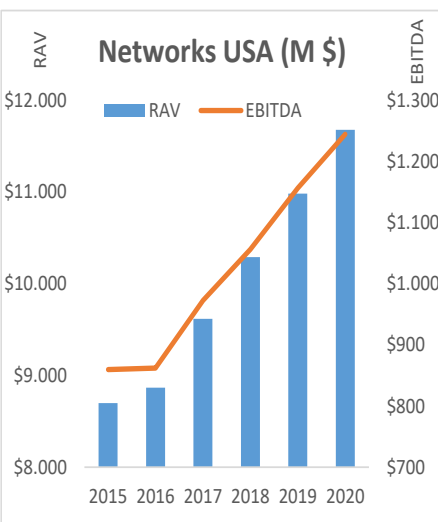
In the US, Iberdrola operates in Maine, in the distribution and transmission business in the Central Maine Power (CMP), in New York through the New York State Electric & Gas Corporation (NYSEG) and Rochester Gas and Electric Corporation (RG&E). As of the end of 2015, overall electric power distributed was 31,337 GWh, with 2.2M users of electricity and 0.8M of gas. Revenues are essentially regulated and are based on tariffs set in accordance with the various regulatory bodies and are based on the cost of providing service. More specifically, they must be enough to cover its operating costs (energy costs,

Figure 20: Networks UK RAV and EBITDA evolution



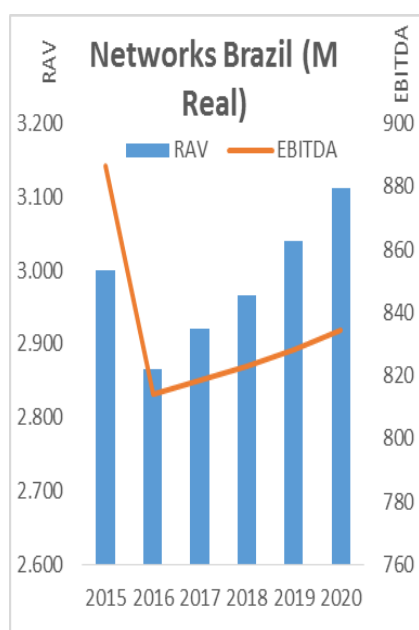
Source: Company Report and Analyst's estimates

Figure 21: Networks USA RAV and EBITDA evolution



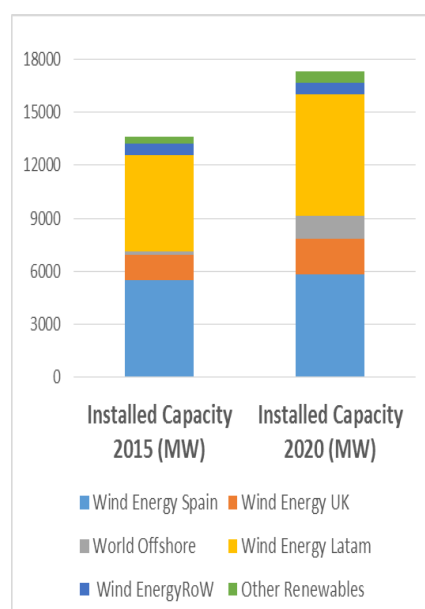
Source: Company Report and Analyst's estimates

**Figure 22: Networks Brazil
RAV and EBITDA evolution**



Source: Company Report and Analyst's estimates

**Figure 23: Renewables Installed
Capacity Evolution (2015-2020)**



Source: Company Report and Analyst's estimates

finance costs and the costs of equity) and also they must reflect the Company's capital ratio and the reasonable return on equity²⁸. Tariffs reviews cover various years (three in New York). In general, there is regulatory visibility in New York until 2019 and in Main and Connecticut there will be reviews in 2017. This is the area where most of the growth of this business is expected, with EBITDA (M USD) growing 44.82% and the RAV (M USD) 34%, as a result of the average annual investment between 2016-2020 of 1,061M USD, which is much higher than the 2012-2015 average of 646M USD.

Finally in Brazil, electricity distribution activity is carried through multiple Iberdrola joint ventures and through Elektro Electricidade e Serviços, S.A. (ELEKTRO). Electricity power distributed came at 16,190 GWh for Elektro with 2.5M users of electricity, as of the end of 2015. In May 2015, the Fourth Tariff Review Cycle was approved and applied to ELEKTRO in its tariff review in August 2015, in which the approved regulatory allowed return was 8.09% after tax (higher than the previous 7.5%) and all investments made were recognized in the RAV. Among the ANEEL Ranking (includes 64 distributors) ELEKTRO has moved from the 13th position (2011 in the 3rd Tariff Cycle) to the second position in 2015 in the 4th Tariff Cycle. It is thus, one of the most efficient distributors in Brazil. We estimated that the RAV (M REAL) will increase 2.4%, despite and EBITDA (M Real), as a consequence of the increase in the annual investments. In fact, the annual average 2016-2020 investment is estimated to be around 391M Real, which is a lot higher than the annual 2013-2015²⁹ average (245 M Real). Finally, EBITDA (M Real) was estimated to decrease 6.3%. This might have to do with the fact that, according to our estimates, the *other revenues* was kept constant and carried a value five times as high as the regulated revenue, due to lack of information.

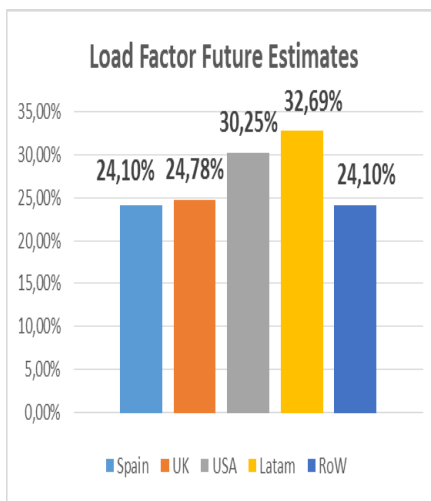
Renewables

Iberdrola has been consolidating its leading position in renewables with 14,184 MW of installed capacity dispersed in many countries, with a special emphasis in Spain (5861 MW) and in the US (5540 MW). As of the end of 2015, Iberdrola's renewables was comprised of 97.1% of wind and the remaining (409 MW) was composed of hydraulic, solar thermal hybrid and photovoltaic. Overall production at the end of 2015 was 31,228 GWh and it has decreased 2.6% from a year earlier. In 2015, Iberdrola proceeded to the installation of 139 MW in new renewables (all of it was in onshore wind). The company's expansion strategy

²⁸ US Remuneration on Investment: Allowed Return * Capital Ratio * RAV

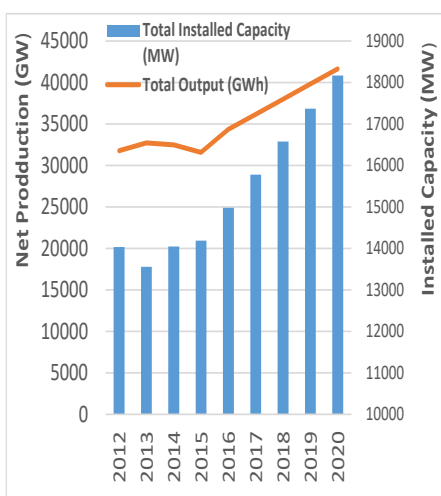
²⁹ The investment of 2012 was excluded from this average, as a one-off investment of 1238M Real was registered, which is 6 times as high as the annual investments between 2013-2015

Figure 24: Load factor future estimates



Source: Company Report and Analyst's estimates

Figure 25: Installed Capacity and Total Output Predictions until 2020



Source: Company Report and Analyst's estimates

passes through: less future share on Spanish renewables, betting massively on offshore wind, new onshore wind parks in the US and in the UK, which offer an attractive and granted remuneration per MW. Despite the fact that offshore wind is more expensive as the onshore (2.75M€/ MW vs 1.23M€/ MW), it has a much higher and stable Revenue/MW (182€/MW³⁰ vs 80€/MW). Two general business drivers that are important to highlight are the following ones: 1) electrification of the economy as planned in COP21 to integrate renewables into the power mix and to compete fairly with other sources and 2) the solid business in strategic markets via the high regulatory through long term prices stability as the remuneration is guaranteed for the future through via feed-in tariffs.

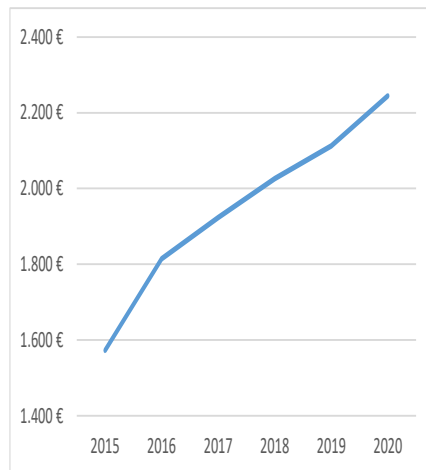
As it was explained before, renewable energy sources are the first ones to come in the merit curve (marginal cost is close to zero), therefore they are never the marginal setting technology which depends on demand. This is because renewables operate under special regime, while conventional technologies are under ordinary regime. However, renewables production is dependent on external factors (wind, sun), once the load factors will vary accordingly. Firstly, Iberdrola renewables portfolio is geographically widely dispersed, which ensures a stable overall load factor³¹. Second, 32% of the total 3982 MW new capacity will come from offshore wind in the UK and in the RoW with a future 24.78% load factor and higher Revenue per MWh (agreed remuneration per MW for more than a decade for all the offshore wind projects). Notice that in the end of 2015 Iberdrola only had 194MW and in the end of 2020 we predict that, based on its CAPEX plan, there will be 1258MW. However, they require substantial initial investments, which are twice as expensive as the onshore wind and that is why 45% of total expected Capex will be directed to offshore wind. The expected annual Capex should come at around €1.3bn and total output should be around 41630.5 GWh (increase of 32% relative to 2015), according to the planned future installations and estimated load factors (equal to the average of 5 years before for each location). While in Spain and in the RoW evolution in production until 2020 should remain rather stable (Spain should increase 8% and RoW decrease -5.30%), we expected great growth thanks to new offshore and onshore wind installations in the regions.

In Spain, in June of 2014, RD 413/2014 (6 year horizon) is the current remuneration system that regulates the energy production activity generated from renewables. It takes into account the remuneration for investment at a pre-defined fair rate of 7.5%, which is based on the 10 year Government bond plus a

³⁰ This value was obtained through the average of the future Revenue (€) per MW, after having converted from pounds to euros as we are considering that almost all offshore projects will take place in the UK

³¹ The 2012-2015 total Load factor weighted average was equal to 27.15% and the highest value was 27.94% and the lowest was 26.18%

Figure 26: Renewables EBITDA historical and future estimates



Source: Company Report and Analyst's estimates

300bp spread and the remuneration for operation. This is intended to level the playing field for fair competition with conventional technologies, as these facilities have higher initial costs. In fact, in the past, as a way to decrease the tariff deficit, in 2013, the government announced measures to cut the renewables remuneration (before, the feed in tariff led to higher returns than the current return under framework). Similarly to the Networks, Revenues in Spain are the to the sum of the depreciations plus operating costs plus the regulated operating profit (total fixed assets³² × 7.5%). This past instability and lower returns has to do with the fact that, for the foreseeable future, Iberdrola does not intend to install additional capacity in Spain, and is rather focused on operating efficiency.

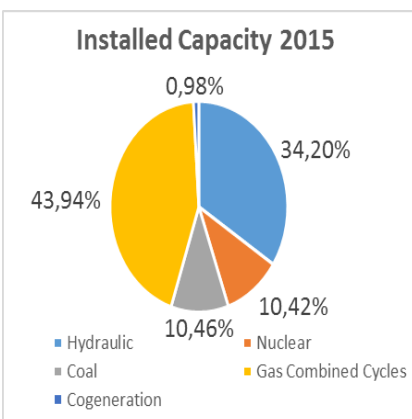
In the US, Iberdrola is the second largest operator of wind energy in the country and there is a great potential for growth which is supported by a solid regulatory support. In fact, half of the 1400 MW development plan that Iberdrola has in the US has long-term PPA, which is very much reassuring the stability of the business. Both the RPSs (Renewable Portfolio Standards) that require utilities to generate a minimum amount electricity from renewables (15-33% of all electricity generation until 2025), tax incentives, through PTC (Production Tax credits; valued at 23USD/MW and have been extended until 2020) and five-year accelerate depreciation have foster investment in renewables. Their purpose is to make electricity production from renewable resources more competitive relative to fossil fuel and nuclear power facilities and has led to the installation of many renewables facilities in recent years. This stability and regulations should not be affected by Trump's presidential mandate. Due to this stability we have assumed that Revenue per MW will be kept constant in the future (80 USD/MW)

The UK intends to source 30% of electricity from renewable sources by 2020 and to deliver this commitment the RO (Renewable Obligation) has been implemented. The RO will be closed in 2017 and it will be replaced by a new system based on Contracts for differences (CFDs) to support low carbon generation, which constitute solid opportunities for growth with long term guaranteed revenues. We have also assumed that Revenue/MW will continue to be 157€/MW in the future as it was in 2015.

Generation and Supply

This business line is composed of two different activities which are bundled since 2011: production of electricity through hydro, nuclear, coal, combined cycle and cogeneration and, at a second stage, it supplies electricity and gas to end-consumers. By the end of 2015, total installed capacity was 30,388 MW

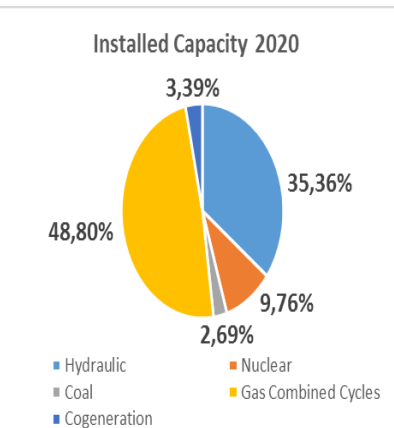
Figure 27: Liberalized Installed Capacity 2015 (excluding renewables)



Source: Company Report and Analyst's estimates

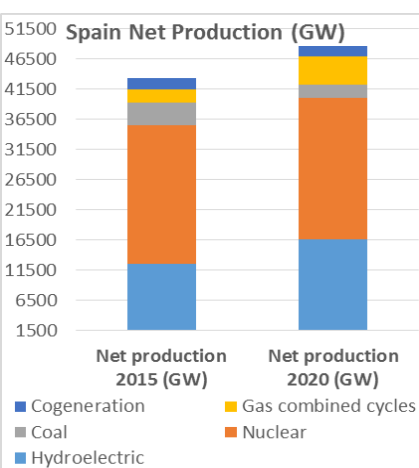
³² Total Fixed Assets were almost 5bn € in the end of 2015 and they will marginally increase in the future (+1.28%), according to Iberdrola's investments in renewables in Spain

Figure 28: Liberalized Predicted Installed Capacity 2020



Source: Analyst's estimates

Figure 29: Spain Net Production (GW) Estimates

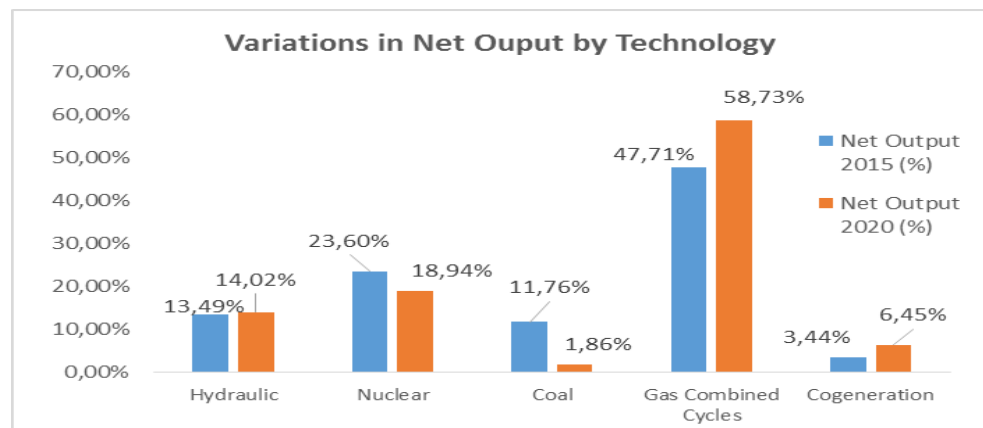


Source: Company Report and Analyst's Estimates

excluding renewables with 19,745 MW in Spain, 4835 MW in the UK and 6282 MW in Mexico. Total capacity has a special and increasing focus on combined cycle and hydro. On the other hand, electricity production, in the same period, was equal to 97,789 GW and most of it came from combined cycle, nuclear and hydro. As it was explained before, the higher the load factor of a certain technology the higher will be its annual total production.

Firstly, in the more mature markets (Spain and UK) we expect moderate demand growth and there is a clear trend towards more cleaner, efficient and more flexible generation through the investment in Hydro. We have also estimated that the gradual reduction of coal will entail the increase production of gas and in renewables. The sale of electricity and gas has become increasingly competitive with margins pushed to the limit, as a result of increasing regulation and taxation. Secondly, in Mexico, Iberdrola will take advantage of the growth opportunities with the recent market opening and of the long term capacity auctions, and will almost duplicate its installed capacity through the investment in thermal plants (CCGTS and Cogeneration) with PPAs. The investment in the UK will be done through Smart Meters (obligation to deploy them to all customers by 2020) and in Portugal it will be done through the construction of the Tâmega hydroelectric complex (1200 MW), which will be operational by 2020. In the Retail business, in Spain and in the UK, there is an increasing high competition, but bear in mind that Iberdrola in Spain is the leader in costs by a 10€ per contract vs competitors.

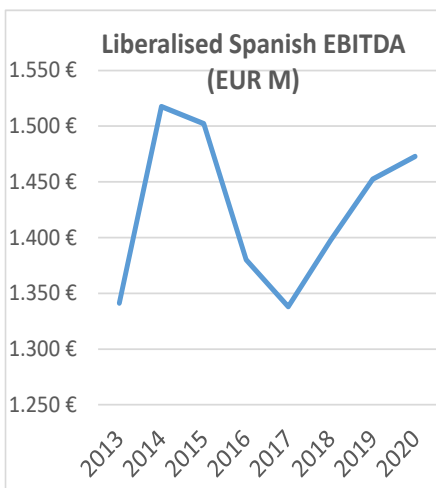
Figure 30: Total variations in Net Output by Technology



Source: Analyst's Estimates

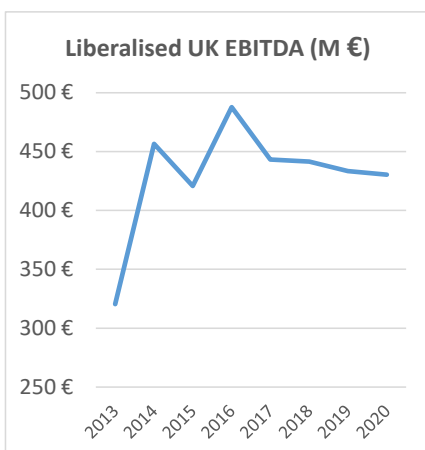
In Spain installed capacity was, at the end of 2015, 19,745MW, in which hydro and combined cycle assumed a greater role (49% and 29%, respectively). After renewables, hydro is the cheapest source of electricity production but its load factor varies significantly (rainfall variations) and has a low load factor (around 20%), whereas nuclear have a load factor around 84%. Gas will still be the marginal technology as we estimated that its marginal cost to be above coal from

Figure 31: Spain EBITDA (EUR M) Estimates



Source: Company Report and Analyst's Estimates

Figure 32: UK EBITDA (EUR M) Estimates



Source: Company Report and Analyst's Estimates

2020 onwards. More concretely, we estimated gas to gas to have a marginal cost of 51€/MWh and coal of 28€/MWh, respectively (Appendix 7). However, based on Iberdrola's predictions of Iberian net productions by 2020 and assuming that Iberdrola will not install further capacity and that it will conserve its market share in Spain, gas load factor should increase at an annual pace of 15% and coal will decrease at an annual pace of 9%. As a result, load factor for gas will be evolve from 4% to 9% and coal from 48% to 30%. In our estimates, we are expecting the total net production of energy generated to increase from 43,338 to 48,743 (12% increase) has to do with two main reasons: the increase of gas load factor that outweighs the decrease³³ in the coal load factor and the construction of the Tâmega hydroelectric complex. After estimating the net output for each technology until 2020, we have assumed the final electricity price to be the sum of the future OMIP Pool price³⁴ plus a premium³⁵ that will be maintained over the years. This premium has been set in 13 €/MWh, which was the average for Iberian Utilities in 2015. In a nutshell, from 2015 until 2020 we are expecting EBITDA to slightly decrease 2% and annualized investments of 262M€³⁶, which is slightly above the average between 2013-2015 of 159.7M €. On the generation side, there will be two negative business drivers: 1) we have estimated the marginal cost of gas to increase 1.7% from 2015 until 2020 and its production is expected to double in this time period, causing pressure in generating costs 2) final electricity price is estimated to be situated in the range of 56-58€/MWh, which quite lower than the price registered in 2015 of 63.32€/MWh. On the supply side, electricity and gas supplied in Iberia should increase with the growth of electricity demand – 0.91% until 2020³⁷ - and we will assume the same supply margin previously estimated in 2015 (10.21 €/MWh). Supply in Iberia in 2015 was equal to 64,998 GW of electricity and gas and we estimated to be close to 67,865 GW in 2020.

In the UK, Iberdrola operates through Scottish Power, and at the end of 2015 total installed capacity was equal to 4835 MW with a very different generation mix relative to the Spanish one. In fact, the production is much more exposed to fossil fuels prices (coal and gas) and hydro assumes a marginal role. Nevertheless, UK policy of closing all coal plants by 2025 and the introduction of the carbon tax floor of 18£ until 2020 strongly contributed to the closure in March of 2016 of Longannet coal plant (the only coal plant held by Scottish Power with a capacity

³³ This is true since the installed capacity of gas is five times as high as coal capacity

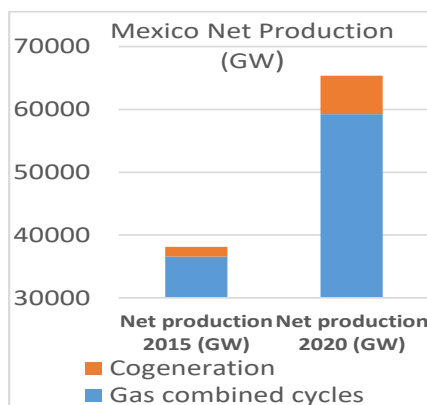
³⁴ Our predictions of the OMIP pool price are expressed according to its forward market and can be found in the “Power Prices” chapter

³⁵ This premium relates to restrictions in the market, ancillary services and capacity payments, as there is a lot of gas that does not enter into the daily electricity market, but must be remunerated as they ensure electricity availability. This information was found in 2015 EDP's *handout*.

³⁶ We have kept the investment shares provided in Iberdrola guidance (44% for Mexico, 28% for Iberia and 28% for UK). However, we have increased total CAPEX from 3700M€ (Iberdrola guidance 2016-2020 investment) to 4672M€ in order for the annual CAPEX to be at least equal to the annual depreciation of the Liberalized sector. Otherwise there would be a perpetual reduction in the asset value

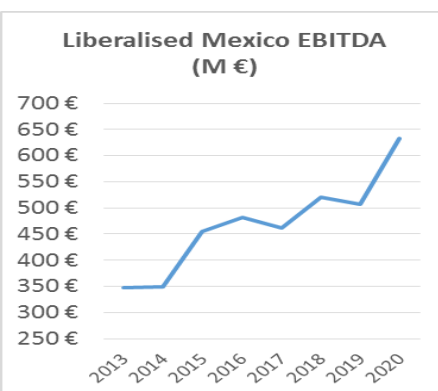
³⁷ This growth is expected to be fueled by the Spanish GDP growth, through this link used to be stronger in the past

Figure 33: Mexican Net Production (GW) Estimates



Source: Company Report and Analyst's Estimates

Figure 34: Mexican EBITDA Estimates (M €)



Source: Company Report
Analyst's Estimates

of 2300 MW). Given the assumption that Iberdrola will keep its share of all the gas produced in the UK (which is expected to increase by 50% according to Iberdrola predictions) and that no further CCGTs plants will be installed by Iberdrola, gas load factor should increase at a pace of 7% annually until 2020 and get from 38.72% to 50.75% load factor figure. The closure of Longannet along with this gas load factor increase entails that gas will represent a much higher percentage of the production mix (from 42% to 93%). Final electricity price until 2020 should be around 55.75 £/MWh, as a result of the sum of the estimated pool price of 42.75£/MWh and a premium of 13£/MWh³⁸. Electricity and gas supplied was equal to 52513 GW and this should remain stable as average annual demand has been stagnant in the last years. As a result of the drastic reduction in generation output, the supply business will carry a larger weight in total gross profit, providing a higher degree of stability to the business. From 2015 to 2020, EBITDA (M €) is expected to remain stable³⁹ and annualized investments will be 262M €, which is more than double the investments of the average between 2013-2015.

Lastly, in Mexico, Iberdrola remained the largest private producer in the country, with 35 TWh sales to CFE (Comisión Federal de Electricidad) out of the total 47 TWh generated (the remaining was directed to costumers). Total Installed capacity was 5082 MW and electricity supplied from CCGT plants represented 96% of all the production (cogeneration represented the rest). Unlike Spain and in the UK which have a low load factor (5% and 36%, respectively), natural gas is the basis for electricity generation in Mexico and Iberdrola registered a load factor of 86% with a very high demand. Mexico's energy reform constitute a great opportunity for additional growth in the coming years as in the beginning of 2016 the first auctions of capacity took place and clean energy certificates were carried out in the first half of 2016. In fact, most of these future capacity additions are very long-term contracts (PPAs of 25 years), which provides great visibility and stability to the projected revenues in Mexico, that is why I am assuming that the unitary margin will be maintained in future equal to the value registered in 2015 of 15.30 €/MWh. This positive outlook justifies Iberdrola's decision to add 3294 MW of thermal capacity in Mexico (600 MW in cogeneration and the rest in CCGTs). Consequently, we estimated that an increase of 42% in net production will take

³⁸ Assumed to be slightly above the one in Spain as in the UK there is more thermal generation that is has to be remunerated outside of the liberalized electricity market

³⁹ In 2016, there is a significant increase in EBITDA, because, despite the decrease in the generation gross profit the supply business remained unchanged and it is twice as large as the generation business, and, there was a large reduction in OPEX and Levies as a result of the closure of the Longannet

place⁴⁰. This is the location in which investment and annual EBITDA growth (39.1%) will be the highest in the liberalised business. From 2015 until 2020, annual investment we have estimated annual CAPEX until 2020 to be 411M€ which is slightly higher than the investment registered in 2015 of 370M€.

Valuation

Discount Rates

First of all, because each one of the three businesses lines has different risks and drivers, we discounted the free cash flows for each segment with the appropriate weighted average cost of capital. For simplicity, instead of trying to value each segment in each country separately (i.e: finding the appropriate rate and value of the networks business in Spain), we have found out a WACC for each one of the three segments⁴¹. Based on the weights of each country⁴² we have estimated the future tax rate, which will needed to calculate the Beta Levered and the Cost of Debt. To get to the D/EV, first the Debt to Equity ratio (assumed to remain constant over the years for all businesses) had to be calculated through average of the comparables chosen for each segment⁴³ (see Appendix 4). Before explaining how the many inputs were calculated, it is worth pointing out which comparables were chosen, once they were the base for the

computation that the final three WACCs (Appendix 3). For the networks sector we have chosen REN, Rede Eléctrica and National Grid, once they reflect the same business and regulatory risks, with a special focus on Iberia and the UK⁴⁴. For renewables, we have chosen EDPR and Next Era Energy since the first one reflects the business environment in Iberia and in the US and the other

operates just in the US, a region in which Iberdrola has a strong presence. Lastly, in the integrated utilities Endesa, Enel, EDP, Acciona, EDF and Gás Natural were considered to reflect the Iberian liberalised environment and business risks. Despite the fact that none of these companies operate in the UK and in Mexico, Iberdrola's liberalized business is mostly done in its domestic market.

In order to get to the cost of equity of each business line, we have used the CAPM model – a standard practise in the industry – in which the risk free rate

Figure 35: Weights for Tax Rate computation

	Weight in terms of EBIT (%) as of the end of 2015		
	Networks	Renewables	Liberalised
Spain	41,0%	29,4%	75,09%
UK	33,5%	37,6%	7,76%
USA	20,1%	19,0%	0,00%
Brazil	5,3%	5,9%	0,00%
Mexico	0,0%	8,0%	21,86%
Total Business Line / Total EBIT	61,65%	16,4%	24,00%

Source: Company Report
Analyst's Estimates

⁴⁰ In Mexico, no major structural generation mix changes are expected to occur, so load factors of gas and cogeneration follow a moving average of the last 5 years.

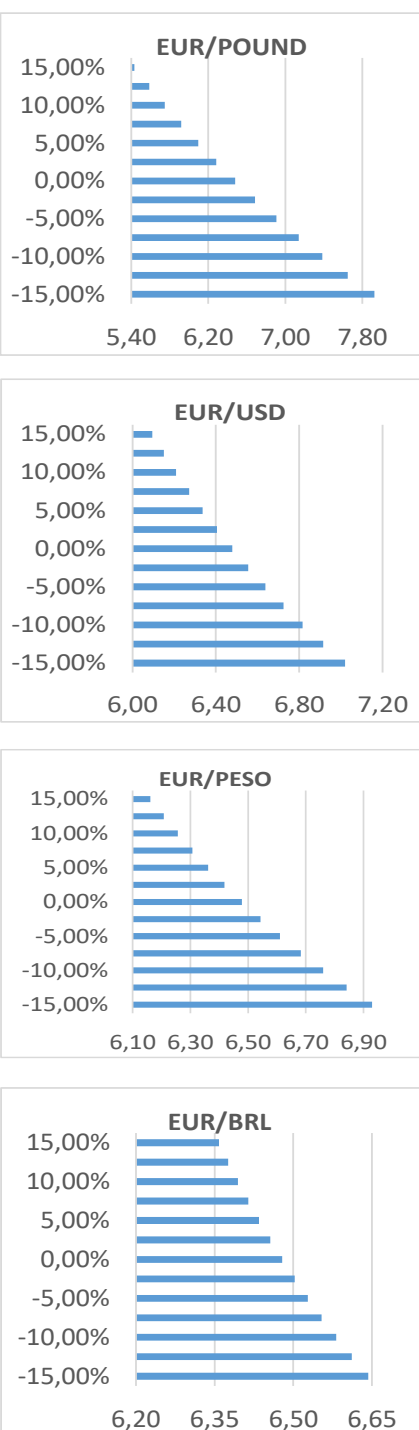
⁴¹ Since all the discounted Free Cash Flows are in Euros, all the inputs used to calculate the final three WACCs are expressed in Euros

⁴² The weight of each country for each business was based on the percentual contribution to the 2015 EBIT, seen in this Figure 35

⁴³ Note that for the computation of the D/E ratio for the Liberalized business, we have excluded EDP as it is a clear outlier; it has a D/E ratio of 1.81 and the average of all comparables of this sector excluding EDP is equal to 0.88

⁴⁴ As it was already mentioned, these two regions constitute an important bulk of Iberdrola's Networks operations

Figure 36: Sensitivity Analysis on FOREX



Source: Analyst's Estimates

was assumed to be equal to the average of the last 5 years of the German Bund⁴⁵ (most of Iberdrola operations is located in Europe) and a 6% market risk premium has been assumed⁴⁶. The last input to get to the cost of equity of each one three business lines is the beta levered. Due to the different capital structure between Iberdrola and the chosen companies we must remove the debt component of each one them. For this purpose, we must unlever the comparables equity beta levered and then lever it up for each segment according to its D/E⁴⁷ (Appendix 4). We have obtained the following beta unlevered for networks, renewables and liberalised segment: 0.434, 0.466 and 0.525 (Appendix 3). Note that to get to the unlevered beta for each segment, we have done a simple average of the comparables in each segment.

In order to find the cost of debt for each sector, we have summed the 1.29% risk free rate to a spread that is consistent with the current rating of Iberdrola and interest coverage ratio. Then we have multiplied this sum by (1-Tax Rate) of each sector). This spread derived from the *Damodaran Cost of Debt Estimation for Large Firms*. After calculating the 2015 interest coverage ratio for Iberdrola (2.381), following the *Damodaran Table*, we notice that this value is consistent with the BB+ rating, which corresponds to a spread of 3.25%. The cost of debt for the Networks, Renewables and Liberalised sector is the following one: 3.27%, 3.28% and 3.22% (only the tax rate in each segment differs).

Sensitivity Analysis

There are many inputs in the model that are incorporated in our predictions and that derive either from our own analysis or from the market (forwards). As a result, there are significant risks that are arising from the model that need to be carefully evaluated in order to check what is the impact on the final target price if there is a given variation in these inputs⁴⁸. We have considered these to be the most relevant ones: FX, Commodity prices and the Spanish and UK final electricity price. Note that the sensitivity analysis was done to serve the purpose of evaluating how the price target would change for changes in a certain parameter from 2020 onwards, affecting thus, the terminal value of the respective sectors, since most of the Enterprise Value is being derived from this component. First of all, the FX risk is very significant because, in our model the four exchange rates against the EURO were chosen according to the most recent market sentiment and expectations (forwards). However, the reality is that there might

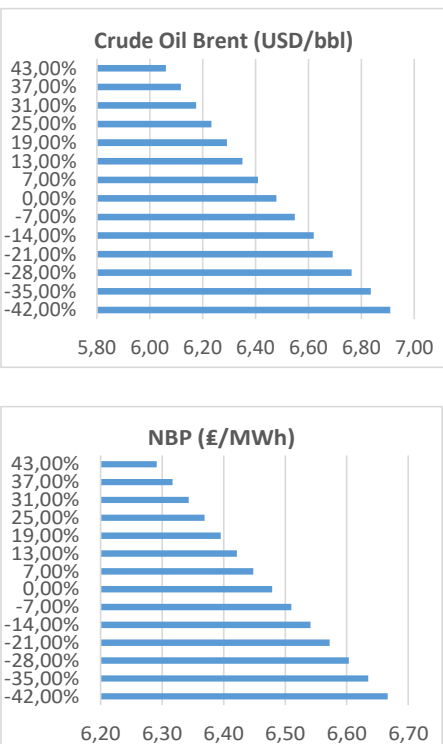
⁴⁵ The average is being used since the value as of the beginning of 2017 was 0.2%, which is not realistic with the gradual increase of risk free rates that we expect in the future, with the European economy recovery and after recent record lows German Bund rates

⁴⁶ This value was based on Damodaran analysis of "Equity Risk Premium"

⁴⁷ The D/E ratio for Networks, Renewables and for Generation and Supply are the following ones: 1.04, 0.61 and 0.85

⁴⁸ Note despite the wind load factor (input that was computed from the historical average for each region) has an impact on Net production and, in turn, in Renewables Revenues, this load factor has been quite stable over time, so we are assuming that they will remain stable in the future. Therefore, there was no need to perform a Sensitivity Analysis for this input

Figure 37: Sensitivity Analysis on Commodity Prices: Brent and NBP

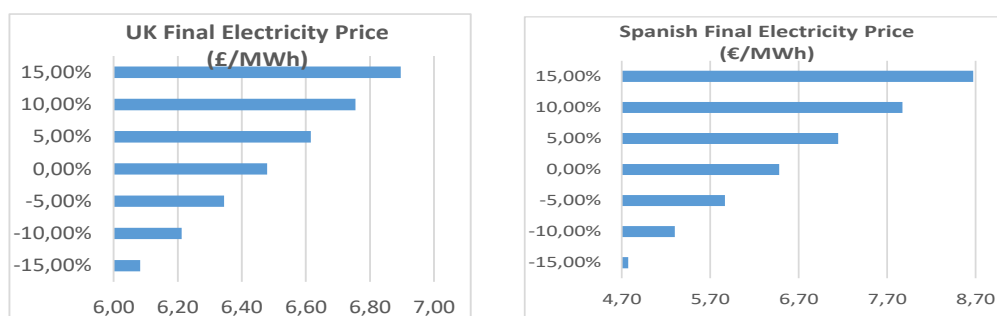


Source: Analyst's Estimates

changes in the fiscal and monetary policies of the countries that would affect Iberdrola's earnings. Therefore, since most of Iberdrola's earnings come from outside Spain it is very important to see which are the exchange rates that affect the most Iberdrola's price target. Given the large volume of operations, the EUR/POUND and EUR/USD (respectively) are ones that affect the most the price target. One of the reasons why the EUR/POUND is the most sensible currency is due to the significant investment in offshore wind that will take place in the UK.

As to Commodities, on the one hand, it is clear that the fact that Iberdrola closed in early 2016 the 2300 MWh coal plant in the UK (almost all of the coal produced by Iberdrola) made its price almost insensible to variations to the API2\$ and to the price of Emissions Allowance, since coal has an emission CO2 factor almost 3 times as high as gas⁴⁹. On the other hand, the fact that, as explained before, there will be more capacity of CCGTs in Mexico and the load factor of gas in both the UK and in Spain will increase, will make Iberdrola's price target vary more as in the past with the same variations of Crude Brent Oil (US\$/bbl) and NBP £/MWh. Finally, also very important is Iberdrola's market risk not only via commodity prices but also through the final electricity price in Spain and in the UK, though they are obviously related via the marginal technology which determines the pool price⁵⁰. Note that in Mexico there are long term agreements that remove most of this pool price risk. It is vital to point out that the fact that in the UK net production reduced drastically (-36%), whereas in Spain net production was estimated to increase 12% and that in the end of 2015 the Liberalised EBITDA in Spain was four times as high as in the UK, makes variations of the final electricity price in Spain to have more impact on the price target than in the UK.

Figure 38: Sensitivity Analysis on final electricity price in the UK and Spain US

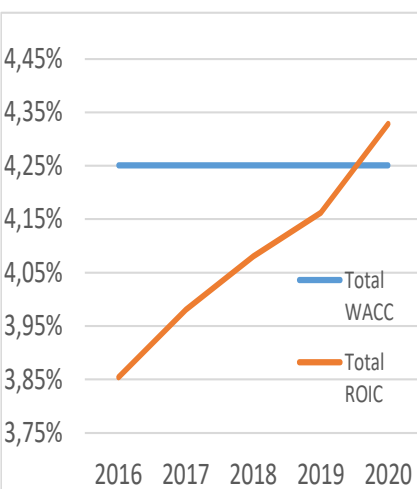


Source: Analyst's Estimates

⁴⁹ This information was extrapolated from EDP's CCGT and Coal Plant in Iberia. According to this source: Coal had a emission factor of 0.9 ton of CO2/mmBtu, whereas Gas had 0.36 ton of CO2/mmBtu

⁵⁰ This link was not analyzed due to its complexity. In fact, there is daily auctions and electric prices are set every day according to unpredictable weather conditions and demand oscillations

Figure 39: Total ROIC (%) vs Total WACC (%) Analysis



Source: Analyst's Estimates

Figure 40: Perpetual Growth Rate Sensitivity Analysis

Sensitivity Analysis Growth Rates	Perpetual Growth Rate Liberalised					
	1,08%	1,28%	1,48%	1,68%	1,88%	
Perpetual Growth Rates Networks	1,57%	6,68	6,93	7,20	7,51	7,88
	1,37%	6,30	6,54	6,81	7,13	7,49
	1,17%	5,96	6,20	6,48	6,79	7,15
	0,97%	5,67	5,91	6,19	6,50	6,86
	0,77%	5,42	5,66	5,93	6,25	6,61

Source: Analyst's Estimates

Fair Value and Final Remarks

First of all, the Multiples Valuation can be found in Appendix 2, in which a 2017 Target Price of 4.19€ was achieved after we have used the weighted average of the P/E 2017 (Bloomberg Estimates) and of the EV/EBITDA 2017 (Bloomberg Estimates) for Iberdrola's main peers⁵¹ (utilities with activities in networks, renewables and in the liberalised sector). Under these multiples, Iberdrola is clearly overvalued, especially in terms of EV/EBITDA (+32.13% premium). Of course that, since we are doing a weighted average we are giving more importance to both EDF and ENEL which have below average P/E and have very large market caps, which might be conditioning the results.

The valuation approach that it was used to value Iberdrola was a sum-of-the-parts one to value the main three business lines, meaning that a DCF model was built for one of the segments⁵². Our DCF model explicitly estimated the cash flows for each business until 2020, since Iberdrola's investment guidance is until 2020 and, not knowing the investment plan poses a real struggle to accurately forecast FCFs for 2021 and so on. I have estimated the cash flows for each business in each location in the respective local currency and then converted them to euros to reflect the future exchange rates. Therefore, all the FCFs necessary to arrive at the value of each segment are in Euros.

Before applying the perpetuity formula, a perpetual growth rate was defined for each one of the three business segments. In fact, the three different sustainable growth rates (ROIC⁵³ × Reinvestment Rate⁵⁴) that were calculated for each

business line in 2020 will correspond to the perpetual growth rates that we used in our model, as these rates evolved in a stable manner from 2016 until 2020. We have achieved the following perpetual growth rates for Networks, Liberalised and Renewables: 1.17%, 1.48% and 0.73%. After using the perpetuity formula we got to the terminal value of each business from 2020 onwards⁵⁵. Unexpectedly, the perpetual growth rate

⁵¹ Notice these weighted averages will equally (50:50) contribute to our Relative Equity Valuation. For the P/E, we just have to multiply the multiple (13.38) for my estimate of the Iberdrola net profit for 2017. Similarly, to get the Relative Equity Valuation under the EV/EBITDA 17 multiple we have to multiply this multiple for our estimate of the EBITDA of Iberdrola in 2017 and then remove the Financial Debt.

⁵² For the "Corporate and Adjustments and Other Businesses, a simple EBITDA multiple was applied (average of the other three businesses' EBITDA multiple), in order to get their fair value for Iberdrola

⁵³ A strong assumption had to be made due to lack of information in order to get to the ROIC of each business segment. After calculating the total ROIC for Iberdrola (assumed to be equal to NOPLAT t / (Intangibles Assets t-1 + PP&E t-1 + NWC t-1)) we have defined weights to be applied to the total ROIC to get to the ROIC of each business line. The weight in Networks (for instance) would be follow this formula: CAPEX Networks t / Total CAPEX t. The assumption that is being made is that the Invested Capital for Networks will be as large (for example) as the total CAPEX invested in that year.

⁵⁴ The reinvestment rate was assumed to always behave according the following formula: (1-Payout Ratio). Since the Payout Ratio remains constant and equal to 75%, the Reinvestment rate, in turn, remains always equal to 25%

⁵⁵ Note that the FCF of 2017 does not enter to the PV of future cash flows. In our model, because 2020 is the end of the forecasting period and because the difference between the WACC and the sustainable growth rates for each one of the segments is very small, the Terminal value assumed 91.39% of the Enterprise Value, while the DCF model predicts only 8.85%

for Renewables should be higher, but one of the reasons why it might not be is that the both onshore offshore wind demands a lot of initial investment and we would need a longer forecasting period. This last free cash flow would ultimately be a lot higher and more stable relative to the previous ones and we would get a more accurate value for the Renewables sector for Iberdrola. Moreover, only from 2020, the total ROIC surpasses total WACC⁵⁶. This has to do with the fact that the heavy investments until 2019 did not have a high enough impact on the NOPLAT of the company.

The sensitivity analysis that was done earlier is determinant to understand just how sensitive the model is to certain inputs. Consequently, we deemed reasonable the final price target to be a weighted average between the most likely scenario (70% probability with a price target of 6.48€) and other three alternative stress scenarios (10% probability for each one) that we have considered possible to happen in the future. Doing this, we have arrived a 6.24€ price target for Iberdrola's share at the end of 2017, which constitutes a predicted market return of 6.14% (including the dividend yield of 4.41%). The first one would

Figure 41: Base and Stress Scenario Analysis

	Probability	Target Price
Base Case	70%	6,48€
Removal of PTC in the US (Renewables)	10%	5,73€
Commodities and Pool Prices Decrease	10%	5,22€
Aggravation of Iberian Regulatory Framework	10%	6,06€
Weighted Target Price	100%	6,24€

Source: Analyst's Estimates

be the removal of the Production Tax credits in the US from 2017 onwards, which would reduce the Revenues/MWh by its value – 23 MWh. The rational for this scenario derives from the recent outcome of the presidential election. Despite the recent extension until 2020 of the PTCs, which are essential to the continuous investment in renewables in the US, Trump's election has come to add instability to the renewables landscape once he is a big supporter of fossil fuels technologies and has little environment concerns. The resulting price target would be 5.73€. Secondly, there might be a further fossil fuel general price decrease (oil, gas and API2 coal) and a consequential pool price decrease in Spain and in the UK (-15% has been assumed) from 2017 onwards. This could happen for multiple reasons⁵⁷, which could results in a market even more oversupplied or if there were to happen a negative shock in demand. The resulting price target would be 5.22€. Finally, the last scenario, would be the sudden aggravation of the Spanish Regulatory Framework, which could be translated into a cut of 15% in the remuneration rate in renewables and in networks. This could come as a result of an unexpected deterioration of the Spanish tariff deficit at the end of the regulatory period of RD 413/2014 (renewables) and of RDL 9/2013 (networks) – 2020 onwards. The resulting price target would be 6.06€

⁵⁶ WACC of each segment multiplied by the weight in Enterprise Value of each segment

⁵⁷ For example, the OPEC members might not reach an oil output agreement and start producing a lot more, or there might be technological improvements in fossil fuels or in renewables that lead to a price decrease

Financial Statements

Balance Sheet	2015	2016	2017	2018	2019	2020
Intangible Assets	20.759,61	21.017,10	21.274,59	21.532,08	21.789,57	22.047,06
PP&E	61.788,59	62.949,57	64.022,78	65.042,45	65.995,36	66.868,66
Financial Assets	4.998,63	4.818,72	4.818,72	4.818,72	4.818,72	4.818,72
Inventories	1.797,20	1.939,95	1.914,99	1.932,25	1.973,84	2.072,13
Receivables	6.663,08	6.234,42	6.154,22	6.209,68	6.343,33	6.659,23
Cash and cash equivalents	1.153,27	1.251,03	926,70	714,15	616,84	684,38
Other Assets	7.503,81	7.483,72	7.479,48	7.482,41	7.489,48	7.506,20
Total Assets	104.664,18	105.694,51	106.591,48	107.731,74	109.027,14	110.656,39
Payables	9.272,22	8.782,40	8.669,42	8.747,54	8.935,82	9.380,83
Financial Debt	30.561,03	31.538,18	31.974,29	32.432,93	32.911,00	33.422,36
Other Liabilities	23.874,88	23.874,88	23.874,88	23.874,88	23.874,88	23.874,88
Total Liabilities	63.708,13	64.195,46	64.518,59	65.055,35	65.721,69	66.678,07
Net Profit Parent	2.421,58	2.171,99	2.295,38	2.413,98	2.516,22	2.691,50
Dividends	1.742,64	1.628,99	1.721,53	1.810,48	1.887,17	2.018,63
Total Equity	40.956,05	41.499,05	42.072,89	42.676,39	43.305,44	43.978,32
Income Statement						
Total Revenue	31.418,69	31.041,69	30.642,37	30.918,49	31.583,96	33.156,87
Total Procurements	- 18.576,02	- 18.421,69	- 17.687,36	- 17.642,97	- 18.014,61	- 19.022,34
Gross margin	12.842,68	12.620,00	12.955,01	13.275,52	13.569,35	14.134,53
EBITDA	7.305,90	7.555,08	7.814,52	8.080,56	8.301,33	8.716,68
Depreciation and Amortization	- 3.476,61	- 3.107,09	- 3.132,10	- 3.204,95	- 3.253,89	- 3.394,36
Operating Profit	3.829,29	4.447,99	4.682,42	4.875,61	5.047,44	5.322,32
Results from Companies Consolidated	55,32	-	-	-	-	-
Net Gains from Disposal of Non-Current Assets	125,07	-	-	-	-	-
EBIT	4.009,68	4.447,99	4.682,42	4.875,61	5.047,44	5.322,32
Net Financial Expenses	- 1.023,05	- 1.367,35	- 1.429,77	- 1.457,63	- 1.486,93	- 1.517,47
EBT	2.986,62	3.080,65	3.252,65	3.417,98	3.560,51	3.804,85
Income Tax	- 527,09	- 870,71	- 919,32	- 966,05	- 1.006,34	- 1.075,40
Net Profit For the Year	2.459,53	2.209,94	2.333,33	2.451,93	2.554,18	2.729,45
Non-controlling Interest	- 16,50	- 16,50	- 16,50	- 16,50	- 16,50	- 16,50
Subordinated perpetual obligations owners	- 21,46	- 21,46	- 21,46	- 21,46	- 21,46	- 21,46
Final Net Profit for the Year	2.421,58	2.171,99	2.295,38	2.413,98	2.516,22	2.691,50
Cash Flow Statement						
EBIT	4.009,68	4.447,99	4.682,42	4.875,61	5.047,44	5.322,32
(-)Adjusted Taxes	- 707,65	- 1.257,17	- 1.323,43	- 1.378,03	- 1.426,60	- 1.504,29
NOPLAT	3.302,03	3.190,82	3.358,99	3.497,58	3.620,84	3.818,03
(+)D&A	3.476,61	3.107,09	3.132,10	3.204,95	3.253,89	3.394,36
Operating Gross Cash Flow	6.778,64	6.297,91	6.491,09	6.702,52	6.874,73	7.212,39
(-)CAPEX	- 10.157,90	- 4.268,07	- 4.205,31	- 4.224,61	- 4.206,80	- 4.267,66
(-) Change in NWC	4,21	1,00	5,40	3,74	9,00	21,28
Change in Other Operating Assets	- 4.574,99	73,00	251,51	261,62	267,45	281,04
Change in Other Operating Liabilities	3.111,05	147,60	6,97	4,82	11,62	27,47
Operating Investing CF	- 11.617,62	- 4.343,66	- 4.458,39	- 4.485,15	- 4.471,63	- 4.542,51
Free Cash Flow to Firm	- 4.838,98	1.954,25	2.032,69	2.217,37	2.403,10	2.669,87
Change in Excess Cash	678,38	283,58	316,35	218,07	110,62	36,09
Net Interests	- 1.023,05	- 1.367,35	- 1.429,77	- 1.457,63	- 1.486,93	- 1.517,47
Tax Shields	180,55	386,46	404,11	411,98	420,26	428,90
Change in Debt	2.211,87	977,15	436,11	458,64	478,07	511,37
Net Change in Equity	2.791,23	- 1.666,94	- 1.759,48	- 1.848,44	- 1.925,12	- 2.056,58
Free Cash Flow available from Investors	4.838,98	- 1.954,25	- 2.032,69	- 2.217,37	- 2.403,10	- 2.669,87

Source: Analyst's Research and Estimates

Appendix

Appendix 1: Net debt/EBITDA vs % Regulated Activities (2015)

Utilities	Net Debt/EBITDA	Rating (SP)	% Regulated +PPAs+Long Term Generation
EDP	4,348	BB+	88,00%
Iberdrola	3,699	BBB+	76,00%
Gas Natural	3,410	BBB	62,60%
Endesa	1,700	BBB+	61,00%
ENEL	2,688	BBB	66,68%
EDF	1,398	A-	36%
RWE	1,466	BBB-	63%
Centrica	7,911	BBB+	2%
Verbund	2,880	BBB	16%
Fortum	-0,681	BBB+	22%
National Grid	4,955	A-	92%
REN	5,335	BBB-	100%
REE	3,954	A-	100%
Enagás	5,274	A-	100%

Source: Bloomberg and Company's websites

Appendix 2: Integrated Utilities Multiples Analysis

Integrated Utilities	EV/EBITDA 17E	P/E 17E	Operational ROIC (%)	FCF Yield to EV	Dividend Yield	Net Debt to EBITDA	Equity Beta	Market Value (bn EUR)
EDP	8,25	11,06	7,32%	5,55%	6,56%	4,35	0,98	10,60
Gas Natural	7,36	13,19	7,48%	3,46%	5,59%	3,41	0,94	17,87
ENEL	6,46	12,16	8,45%	3,76%	4,27%	2,69	0,86	42,66
EDF	3,10	11,28	4,15%	-2,75%	9,46%	1,40	1,08	20,53
RWE	3,42	10,90	0,34%	-24,80%	2,34%	1,47	0,88	7,28
Verbund	10,76	20,29	2,38%	5,65%	1,78%	2,88	0,81	5,30
Fortum	11,20	21,33	8,67%	2,03%	4,71%	-0,68	1,01	13,13
Weighted Average	6,71	13,38	6,69%	2,38%	5,40%	2,28	0,94	16,77
Iberdrola	8,86	14,46	5,59%	4,32%	4,80%	3,70	0,82	39,46
Comparative Difference	32,13%	8,07%	-16,46%					
Relative Equity Valuation	22.037,91	31.218,13						
Relative Equity Value (50% P/E 17 and 50% EV/EBITDA)	26.628,02							
Implied Iberdrola Target Price	4,19							

Source: Bloomberg and Analyst's Estimates

Appendix 3: Cost of capital Segmental Analysis

	Rf	MRP	Tax Rate	D/E	βu	βL	Re	Rd	WACC
Networks	1,29%	6,00%	28,05%	1,00	0,43	0,75	5,77%	3,27%	4,06%
Renewables	1,29%	6,00%	27,78%	0,61	0,47	0,67	5,32%	3,28%	4,20%
Generation & Supply	1,29%	6,00%	29,14%	0,85	0,52	0,84	6,32%	3,22%	4,47%

Source: Bloomberg and Analyst's Estimates

Appendix 4: Unlevering the Equity Beta of the Comparables

		Beta Levered	D/E	Effective Tax Rate	Beta Debt	Equity Unlevered Beta
Networks	Rede Eléctrica	0,77	0,61	26,87%	0	0,53
	REN	0,70	1,71	22,01%	0	0,30
	National Grid	0,75	0,70	14,45%	0	0,47
Renewables	EDPR	0,89	0,71	15,59%	0	0,56
	Next Era Energy	0,51	0,51	30,78%	0	0,37
Integrated Utilities	Endesa	0,73	0,19	21,64%	0	0,64
	Enagás	0,70	0,74	25,77%	0	0,45
	Enel	0,86	1,08	36,15%	0	0,51
	EDP	0,98	1,70	17,50%	0	0,41
	EDF	1,08	0,95	28,55%	0	0,64
	Gas Natural	0,94	0,85	24,25%	0	0,57

Source: Bloomberg and Analysts Estimates

Appendix 5: Sum of the Parts Valuation

Sum of the Parts	Value	Weight in EV	EBITDA 2017	EBITDA Multiple
Networks	30.724,21 €	41,37%	3.637,27 €	8,45
Liberalised	30.312,25 €	40,81%	2.269,91 €	13,35
Renewables	14.518,65 €	19,55%	1.923,22 €	7,55
Other Businesses	- 34,70 €	-0,05%	- 3,55 €	9,78
Corporate and Adjustments	- 1.245,20 €	-1,68%	- 127,28 €	9,78
EV of assets contributing to EBITDA	74.275,21 €			
Stake in Gamesa	1.103,29 €			
Total EV	75.378,49 €			
Financial Debt	- 30.362,53 €			
Perpetual Debt	- 551,11 €			
Minorities	- 3.246,29 €			
Equity Value	41.218,57 €			
Shares Outstanding	6.362,08 €			
Base case Price Target (Dez - 17)	6,48 €			
Final (Weighted) Price Target (Dec-17)	6,24 €			
Current Share Price	6,13 €			
Price Variation	2%			
Dividend Yield	4,41%			
Predicted Market Return	6,14%			
Recommendation	HOLD			

Source: Bloomberg and Analysts Estimates

Appendix 6: Iberian Peer Analysis

	Iberian Peer Analysis			
	Iberdrola	EDP	Gas Natural	Endesa
Country	Spain	Portugal	Spain	Spain
Revenues (€M) 2015	31.418,69 €	15.516,80 €	26.015,00 €	20.299,00 €
EBITDA (€M) 2015	7.305,90 €	3.923,96 €	5.264,00 €	3.039,00 €
of which, % regulated 2015	75,00%	91,00%	64,40%	63,00%
OPEX / Gross 2015	29,82%	27,00%	32,31%	44,55%
Net Profit 2015	2.421,58 €	912,70 €	1.502,00 €	1.086,00 €
Installed Capacity 2015	46471	24364	15471	22164
of which, % of renewable installed capacity 2015	55,65%	70,22%	22,34%	21,50%
Electricity Generation (GWh) 2015	136794	63706	49548	73061
Electricity Load factor 2015	24,27%	25,44%	28,22%	37,63%
Electricity Load factor 2014	27,46%	23,59%	28,76%	35,08%
Electricity Load factor 2013	25,92%	23,45%	31,07%	34,29%
Electricity Load factor 2012	25,59%	22,42%	32,95%	38,21%
Main Markets	Spain, UK, USA and LA	PT, Spain, USA and BR	Spain, IT, Egypt and LA	PT and Spain
% EBITDA not coming from Iberia 2015	53,12%	39,00%	29,50%	0%
Net Debt/EBITDA 2015	3,84	4,43	2,97	1,42

Source: Company's Annual Reports and Analyst's Estimates

Appendix 7: Power prices and Commodity Forecast

	Average Historical Prices	Price Forecast				
	2015	2016	2017	2018	2019	2020
Crude Oil Brent (US\$/bbl)	53,52	45,21	57,55	56,98	56,88	57,22
NBP €/MWh	14,56	11,83	14,51	13,90	14,24	14,50
Coal API2 (US\$/t)	56,77	70,03	63,60	62,10	61,05	60,60
Emissions Allowance CO2 (€/t)	7,67	5,90	5,90	5,92	5,92	5,92
OMIP: Spanish Pool price (€/MWh)	50,32	43,48	43,38	43,70	45,13	44,75
N2EX: UK Pool Prices (£/Mwh)	40,75	42,75	42,75	42,75	42,75	42,75
Coal Spain (€/MWh)	28,79	32,02	30,77	29,34	28,36	28,20
Coal UK (€/MWh)	23,22	38,36	38,06	37,32	36,71	36,57
Combined Cycle (€/MWh) Spain	49,28	43,67	53,29	51,17	49,91	50,11
Combined Cycle (£/MWh) UK	32,02	32,54	34,35	33,95	34,18	34,35

Source: Bloomberg and Analyst's Estimates

Disclosures and Disclaimer

Research Recommendations

Buy	Expected total return (including dividends) of more than 15% over a 12-month period.
Hold	Expected total return (including dividends) between 0% and 15% over a 12-month period.
Sell	Expected negative total return (including dividends) over a 12-month period.

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